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By-Merrill, I. R.

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Because Michigan has developed one of the outstanding driver education programs in the U.S. for high school students, it was selected for an investigation of how educational films were used to aid that program. The study described here focuses on three questions: 1. What is the amount of educational film use (how many, where, what kind)? 2. What film titles are used (which ones, how often, for what purpose)? And 3. How skillful is the film utilization? Driver education instructors in Michigan (N=1,228) were sent questionnaires in May 1959 and their replies analyzed. Though instructors make substantial use of educational film in driver education classes, they should take steps to use them more effectively. Producers of driver education films should study this report closely. Units within the course of instruction should be more minutely titled. The announcement and description of new film titles should be expanded. A final recommendation is that a continuing series of brief regional workshops in driver education audiovisual training techniques be instituted. (Author/GO)

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Films in Driver Education

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Films in Driver Education

How Educational Films Are Used in Michigan to Accomplish Objectives of High School Driver Education Courses

I. R. Merrill

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Preface

Approximately 250 educational film titles pertaining to traffic safety were estimated to be available at the start of the spring, 1959, semester for use in high school driver education courses. This far exceeds the average number available for other courses in the curriculum. Despite this fact, no survey of the application of educational films to driver education had ever been conducted in the United States.

Because Michigan has developed one of the outstanding driver education programs in the United States for high school students, it was selected for investigation of how educational films were used to accomplish the objectives of that program. During the planning phase of the project it became apparent that the survey should focus upon three objectives, two primary and one secondary, which were stated as the following questions:

1. What is the amount of educational film use?
   (How many – where – what kind)?
2. What film titles are used?
   (Which ones–how often–for what purpose)?
3. How skillful is film utilization?

Subsequently, the question of course organization was raised. Was there any evidence from the way films were integrated into the course that the current practice of dividing it into approximately ten units of instructions was unsatisfactory? If so, how might it be reorganized?

It was decided to limit the focus of the study to educational films. Therefore, information was not sought on the use of film strips, drivo-trainer film, kinescopes of television programs, or other audio-visual instructional materials.

Accordingly, the 1,228 driver education instructors listed in Michigan were mailed a questionnaire late in May 1959 as part of a census survey. This report is based upon an analysis of their replies.

The reader is referred to Part D for an overview of the findings, along with the conclusions and recommendations. Driver education instructors will be chiefly interested in reading Parts A through D, along with the Appendix Tables and Illustrations in Section II, which give data on each film title reported shown in Michigan driver education classroom instruction. Film producers and research personnel will find Section II also includes a description of survey methodology, procedures, and additional information helpful in evaluation of the findings reported.

Acknowledgments

Grateful acknowledgment of assistance is due Philip D. Rowley, who as special research assistant participated actively in the planning phase and served as supervisor of the field work involved in data collection. He was also responsible for the major portion of the coding of the questionnaires. Special thanks are also due Emily Cumberland, project secretary.

Staff members of the Highway Traffic Safety Center and the Audio-Visual Center were most helpful in the original planning phases and in the technical assistance and advice graciously given during the analysis of the data. However, the writer remains responsible for the findings and conclusions that follow.

The Department of Television Broadcasting generously permitted the writer to reduce his full-time commitment as Director of Research in order to accept a part-time appointment with the Highway Traffic Safety Center and become Principal Investigator for this project.

A substantial portion of the early planning for this project was carried out under the supervision of Loran C. Twyford, who preceded the writer as Principal Investigator. This investigation was supported by Research Grant RG-5786 from the Division of General Medical Sciences, Public Health Service, U. S. Department of Health, Education and Welfare to Michigan State University, and conducted under the joint auspices of the Audio-Visual Center and the Highway Traffic Safety Center of the University.

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SECTION I

Report

PART A

The Pattern of Use

One of the survey's two major research questions was, "What was the pattern of educational film use?" The answer to this question must be given in terms of number of film showings, for it really asks whether driver education instructors made frequent use of this instructional material.

It was also of interest to inquire if location, school size, major film objective, and unit of instruction were related to frequency of showing. For example, it was possible that colder weather, possibly making driving unduly hazardous in Michigan's Upper Peninsula, might be related to an increased reliance on educational films. On the other hand, the distance of the Upper Peninsula instructors from film libraries might be related to reduced usage of films. Analysis of the data could provide a general answer if frequency of usage was related to geographic location of the instructor.

Some Michigan State University faculty members suspected that more film showings occurred in classes conducted in class A high schools, because such schools were considered to have, in general, more projection equipment and more money for film rental than the smaller schools. On the other hand, if they also had more automobiles available for practice driving, they might well have fewer film showings.

On occasion the comment has been made that a great deal of money has been expended on the production of slick "Hollywood" attitude films, often with film stars in the cast. Such films, using the dramatic format, make for high entertainment but have little educational effect, it is sometimes charged. What proportion of the films shown in driver education classes are of this type? Are they crowding out the important information and skills films?

Of the ten units of instruction into which the driver education course is typically organized, which unit receives the most thorough film treatment? Do some units of instruction receive no film showings at all?

The major purpose of this analysis of pattern of use was to look at enough of the variables to make possible estimates necessary for sampling in further studies. The existence of such variables would have to be ascertained before one could inquire if there were indeed some typical pattern of use throughout the state.

After the field work for the present study had been completed, a national survey of driver education courses was published which reported that 55 percent of all schools responding to the national questionnaire used teaching film and projection equipment. Included in this percentage were both motion pictures and film strips[1]. If this is the case, then usage in Michigan was somewhat above the national average, since 73 percent of all Michigan classroom instructors reported using educational films.

Area and School Size

There is no survey evidence to support the suggestion that instructors in the Upper Peninsula show fewer films than instructors in the rest of Michigan because of their geographical location. There was

[1]Norman Key, *Status of Driver Education in the United States* (Washington: National Commission on Safety Education, National Education Association, 1960), p. 43.

an average of 6 showings per instructor in the Upper Peninsula and an average of 7 in the remainder of Michigan. This difference of one showing in Table 1 has little practical significance in comparison with the much larger differences observed among classes of schools. In the Lower Peninsula, for example, class A school instructors averaged 8 showings, whereas class D school instructors averaged only about 4 showings. Apparently, distance from film source poses no insurmountable handicap for Upper Peninsula instructors.

The problem of the effect of weather contrast between the Upper Peninsula and lower Michigan can be gauged more accurately when the frequencies of showing per unit of instruction are examined in Table 3. Regardless of whether there were fewer days during which practice driving was possible, it is clear that Upper Peninsula instructors did not attempt to show more films pertaining to driving skills than did instructors in the rest of Michigan.

It was also possible to inquire if Upper Peninsula instructors differed from those in the rest of Michigan in their use of films according to type of training objective. Table 2 indicates instructors in both locations averaged two showings each of information, attitude, and skills films. The conclusion, therefore, that geographical location was not related to the pattern of film use was based on the findings that mean film showings for each location did not vary according to type of educational objective, unit of instruction, or, to any practical significance, total showings.

School size proved to be an important variable in the pattern of film use.

As already indicated, the average number of showings received by students from all instructors in class D schools was about four, while the average number from all instructors in class A schools was twice that amount. This finding appeared to confirm the hypothesis that larger schools were associated with a higher average number of film showings. The next stage of the analysis was to examine the proportion of classroom instructors who reported using educational films. Table 1 indicates that more instructors in class A schools used film than those in other Lower Peninsula schools, and the decrease of this proportion was a function of school size. When the mean number of showings was computed only for those instructors who reported using film, quite a different picture emerged. Students in class C schools who saw any films at all received about the same number of showings as similar students in class A and B schools -- approximately ten showings in each case.

This finding was considered significant, in that it indicated a fairly stable pattern of film use among all instructors using educational films. If films were used at all, the instructors apparently felt that about ten showings were necessary for effective instruction.

It may be that financial resources played a part in the declining proportion of instructors who used film at all in driver education classes. It is even more possible that financial resources played a part in reducing film showings among instructors in class D schools, but the data supply no evidence in this regard. The small number of instructors reporting from the Upper Peninsula (24) makes it difficult to generalize for that area.

TABLE 1

PROPORTION OF INSTRUCTORS WHO USED FILM ACCORDING TO LOCATION AND SCHOOL SIZE AND RESULTING MEAN FILM USE

	Mean Number of Film Showings			
	Percent Instructors Using Film		Film Users Only	All Instructors Reporting
	N			
(LOWER PENINSULA)				
Class A.....	113	79%	10.89	8.49
Class B.....	55	73%	9.70	7.05
Class C.....	49	69%	10.35	7.18
Class D.....	37	62%	5.96	3.70
(Sub-total)...	(254)	(73%)	(9.92)	(7.27)
(UPPER PENINSULA)				
Class B.....	14	57%	8.13	4.64
Class C.....	4	75%	14.67	11.00
Class D.....	4	100%	6.00	6.00
Class E.....	2	100%	7.50	7.50
(Sub-total)...	(24)	(71%)	(8.71)	(6.17)
(STATEWIDE)				
All Classes.....	281*	73%	9.83	7.14

*Includes three instructors whose teaching locations were not ascertained.

Type of Film and Unit of Instruction

If the charge were true that commercial producers of traffic safety films were devoting too much of their output to films characterized as attitude films, it still would not mean that high school driver education students were viewing a disproportionate number of

that type. Accordingly, the study was designed to answer the question, "What use is made of films of various types, regardless of the number of film titles available?"

Table 2 indicates that approximately equal use was made of each type of film, the average being two showings each for information, attitude, and skills films. This tendency to distribute frequency of showings equally among films of the three types held regardless of size of school. For example, instructors in class D schools in the Lower Peninsula had one showing of each type, whereas the instructors in class A schools doubled that number, but the proportion remained the same.

TABLE 2

MEAN NUMBER OF FILM SHOWINGS BY INSTRUCTOR ACCORDING TO LOCATION AND TYPE

	Instructors Reporting	Type of Film				
		Not Ascertained	Attitude	Information	Skills	Total
(LOWER PENINSULA)						
Class A	113	1.57	2.36	2.68	1.88	8.49
Class B	55	.16	2.24	2.41	2.24	7.05
Class C	49	.98	2.10	2.18	1.92	7.18
Class D	37	.27	1.24	1.14	1.05	3.70
(Sub-total)	(254)	(1.00)	(2.12)	(2.30)	(1.85)	(7.27)
(UPPER PENINSULA)						
Class B	14	.21	1.21	1.43	1.79	4.64
Class C	4	.50	3.75	2.50	4.25	11.00
Class D	4	.....	4.00	.25	1.75	6.00
Class E	2	.....	2.50	3.50	1.50	7.50
(Sub-total)	(24)	(.21)	(2.21)	(1.58)	(2.17)	(6.17)
(STATEWIDE)						
All Classes	281*	.93	2.12	2.22	1.87	7.14

*Includes three instructors whose teaching locations were not ascertained.

A far different condition is indicated when the number of film showings is related to units of instruction. Although all units of instruction received some film treatment, three units received major attention so far as film showings were concerned: *driving skills, the driver,* and *the car* in descending rank order. Two additional units, *the traffic problem* and *traffic laws and enforcement* received minor emphasis. The remaining units of instruction received minimal support from educational films as an instructional material.

TABLE 3

MEAN NUMBER OF FILM SHOWINGS BY INSTRUCTOR ACCORDING TO LOCATION AND UNIT OF INSTRUCTION

	Upper Peninsula	Lower Peninsula	Statewide*
Units of Instruction			
Driving Skills	2.05	2.19	2.16
The Driver	1.30	1.71	1.68
The Car	1.10	1.30	1.27
Traffic Problem	.25	.62	.58
Traffic Laws & Enforcement	.51	.49	.49
Natural Laws	.30	.34	.34
Other Highway Users	.42	.24	.25
Traffic & Highway Engineering	.10	.24	.23
Related Skills	.13	.12	.12
Miscellaneous	.01	.02	.02
Total	6.17	7.27	7.14
(Instructors)	(24)	(254)	(281)

*Includes 11 films shown by 3 instructors whose teaching locations were not ascertained.

General Pattern for Instructors Using Film

Having examined several variables related to the frequency of showings of educational film in driver education classes, it is now time to attempt a description of the general pattern of film use in Michigan. For this purpose it seemed advisable to focus upon those instructors who used at least one educational film in classroom instruction during the spring semester, 1959. Bearing in mind the accuracy and validity of the survey mentioned in Section II, the data suggest a common pattern of film use for 173 classroom instructors in class A, B, and C Lower Peninsula high schools, a group which the response indicates accounts for 80 percent of the 205 such driver education instructors in the state.

Table 1 indicates the average classroom instructor in this group used ten film showings during the semester. One of these showings was probably a repeat of a title shown earlier in the course. Only 5 units of instruction were involved in the 10 film showings, with *driving skills* receiving 3 showings, *the driver* and *the car* receiving 2 showings each, and *the traffic problem, traffic laws and enforcement,* and *natural laws* receiving 1 showing each. So far as characteristic film type was concerned, the typical instructor used three showings of films with the objective of imparting information, three with the objective of reinforcing or shifting attitudes, three with the objective of demonstrating a

driving skill, and one showing with a mixed or multiple objective. The manner in which unit of instruction and characteristic film type related to these ten showings is indicated in Table 4. This table indicates the average number of film showings for each of the 173 classroom instructors in Lower Michigan class A, B, and C high schools who showed film sometime during the course. Data pertaining to this group were extracted from Table 2, dealing with type of film, and Table 3, dealing with unit of instruction, and were cross-tabulated for presentation in Table 4.

TABLE 4

GENERAL PATTERN OF FILM SHOWINGS ACCORDING TO UNIT OF INSTRUCTION AND TYPE OF FILM

	Type of Film				Total Showings
	Information	Attitude	Skills	Mixed	
Driving Skills	.....	.....	3	.....	3
The Driver	.....	2	.....	.....	2
The Car	2	.....	.....	.....	2
Traffic Problem	.....	1	.....	.....	1
Traffic Laws & Enforcement	.....	.....	.....	1	1
Natural Laws	1	.....	.....	.....	1
Total Showings	3	3	3	1	10

Several facts should be noted about Table 4. The most important is that certain film types seem to be wedded to certain units of instruction. There may be some superficial logic in showing skills films with the unit of *driving skills*. But only a little reflection is needed to realize that an attitude film, for example, might well be applicable to this area: a film title which reinforces the student's attitude as to the importance of perfecting driving skills, or a film title which motivates the student voluntarily to turn in his license when his senses or reflexes deteriorate sufficiently to impair such driving skills. A similar case could be built for the desirability of a diversity of film types being shown in relation to any other unit of instruction.

Another fact to be noted is that each of the ten showings by the average classroom instructor is clearly related to a single unit of instruction.

To return to relation between film type and unit of instruction, Table 4 does not indicate whether the fact that three skills films were shown in relation to the *driving skills* unit was a matter of instructor choice or a matter of necessity. It is possible that the only type available pertaining to that unit of instruction was skills films. The investigation of that possibility is in part the purpose of the next part of this report.

PART B

The Films

The other of the two major research questions of the survey was, "What film titles were used?" The answer to this question was also given in terms of number of film showings, for it really asked which educational film titles received frequent use in Michigan driver education courses.

The word *title* is used here to indicate reference to a particular motion picture film, having a beginning, middle, and end. It may consist of one or more reels. This term is customarily used by film libraries, which, for example, might have in stock 100 films, but only 50 *titles*. This would suggest that the library had in stock an average of two prints of each title.

At the time the survey was being planned it was estimated that there were approximately 250 traffic safety film titles available to driver education instructors. This estimate turned out to be quite accurate, since classroom instructors reported 100 titles used in addition to the 125 titles listed in the film catalogue of the Highway Traffic Safety Center at Michigan State University[1]. Assuming an additional 25 titles had been produced or announced recently, the total of 250 was accounted for.

Planning conferences with the staffs of the Michigan State University Highway Traffic Safety Center and Audio-Visual Center, along with pilot interviews of high school driver education instructors in central Michigan, made it clear that any newly produced film had to clear several hurdles before it had much chance of being viewed by students in a driver education class. Announcement of the film's completion did not always reach the driver education instructor before he completed his course outline and lesson plans. Even had it done so, it would still have to be previewed by the conscientious instructor before it could be shown to the class. The cost of the film might serve to prevent its actual availability. Not all film rental libraries could afford to purchase every traffic safety film produced for profit. Nor was the instructional budget of every high school sufficient to permit unlimited rental of all films desired[2]. Finally, there was the problem of film evaluation. Even after a careful previewing, which involves the preparation of an instructor rating of the film, there was the question as to whether the new film would produce better results than the old favorite, which had the advantage that the instructor was practiced in its effective utilization. Therefore, it was not assumed that by any means all the 250 titles would be shown during the period under survey. Any attempt to survey effectively the possibilities indicated above was discarded, in view of the large increase in questionnaire completion time such an objective would make.

It was possible, however, to inquire as to the general breadth of selection – how many titles of the 250 were shown at least once? It was possible to determine frequency of showings for each title the classroom instructor selected. More significantly, perhaps, it was possible to investigate the problem of film type and related unit of instruction raised in the previous section. Were titles associated with *all* units of instruction? How many such titles were there for each unit of instruction? Were there many titles which appeared to overlap more than one unit of instruction?

How were the titles at least one instructor selected for showing distributed according to film type? Was there an excess of selected attitude films over selected information and skills type films? Most important,

[1]"Catalogue of Traffic Safety Motion Pictures," *Michigan State University Publication*, LII (1957), No. 1.

[2]N. E. Miller, "Graphic Communication and the Crisis in Education," *Audio-Visual Communications Review*, V (1957), p. 21.

what was the relationship between unit of instruction and film type for each title?

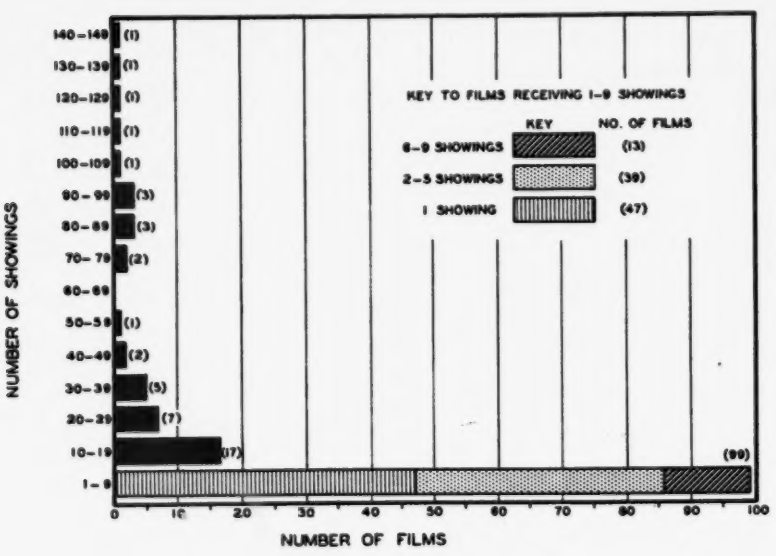
No investigation of available film titles would be complete without inquiry as to whether additional titles were needed for driver education courses. Such titles, it was decided, should be identified according to unit of instruction and specific purpose they were intended to serve.

Basic Thirteen

The breadth of selection of films from the 250 available titles appeared restricted, since only 144 received one or more showings by the classroom instructors who responded to the survey. Thus 58 percent of the available titles were finally selected. Among the 125 titles listed in the traffic safety film catalogue published by the Highway Traffic Safety Center, 81 titles or 65 percent received one or more showings during the survey period.

Customarily, the researcher would report the mean number of showings for the titles selected. Figure 1 shows why such a procedure would in the case of this survey produce a number entirely without meaning. Of the total of 144 titles, 47 were shown but once, an additional 39 received but 2-5 showings, and 13 received 6-9 showings. Further examination of the bar graph reveals that the number of film titles within each class interval continues to decrease until no title occupies the class of 60-69 showings. Thirteen film titles occupy the 8 class intervals lying between 70 and 149 showings. These 13 film titles account for 1,308 showings, or 57 percent of all showings reported.

FIG. 1 NUMBER OF SHOWINGS FOR EDUCATIONAL FILMS IN DRIVER EDUCATION CLASSES.



Clearly, Michigan driver education instructors could be said to rely upon a basic 13 traffic safety film titles selected from a total of 250 available.

Table 5 presents the basic 13 by name in order of frequency of showing giving the instructor classification of the title according to type and unit of instruction with which it was associated. The most frequently shown film (142 showings) was "Driving in the City," a skills film associated with *driving skills.* In second place (133 showings) was "The Case of Officer Hallibrand," an attitude film associated with *the driver.* The most frequently shown information film ranked fifth (116 showings) and bore the title "The ABC of the Automobile Engine," and was associated with *the car.*

Six of the thirteen titles were associated with *driving skills,* and all were of the skills type. Five of the thirteen titles were associated with *the driver,* and all were of the attitude type. Two of the thirteen titles were associated with *the car,* and both were of the information type. The basic 13 represent a second instance of the phenomenon of the wedding without exception of film type with unit of instruction.

A large proportion of the basic 13 titles were produced by the automobile and allied industries as a public relations activity and are available for free film distribution. One may conclude that either these films are of outstanding quality or free distribution is the most important factor in film title selection in driver education courses. It is also possible that both factors are important in film selection.

The reader is cautioned against the temptation to fit the basic 13 titles into the pattern of film use described earlier. Of course, there is a very strong likelihood that one or more of these titles appeared on the questionnaire of every classroom instructor who responded. During the planning sessions for the survey, "The Case of Officer Hallibrand" was generally conceded as being shown by almost every instructor in the state. This assumption was either viewed with pride or alarm, depending upon the consultant. Yet it is possible to state, with 281 classroom instructor questionnaires and only 133 reported showings, that this most popular of attitude films was shown by less than half the instructors.

This caution is made lest the reader be unintentionally led to the conclusion that the instructors were rigidly uniform in film selection. While it is true that the present course organization seemed particularly adapted to 10 showings of educational films which were related to 5 units of instruction, the fact re-

TABLE 5

BASIC 13 FILM TITLES BY ASSOCIATED UNIT OF INSTRUCTION ACCORDING TO ESTIMATED FILM TYPE AND FREQUENCY OF SHOWING

Title	Unit of Instruction	Film Type	Frequency
Driving in the City	Driving Skills	Skills	142
Case of Officer Hallibrand	The Driver	Attitude	133
Driving on the Highway	Driving Skills	Skills	123
Driving Under Adverse Conditions	Driving Skills	Skills	119
ABC of Automobile Engine	The Car	Information	116
And Then There Were None	The Driver	Attitude	97
Driving at Night	Driving Skills	Skills	95
Parking the Car	Driving Skills	Skills	90
Your Permit to Drive	The Driver	Attitude	88
Smith System of Non-Accident Driving	Driving Skills	Skills	83
We Drivers	The Driver	Attitude	80
ABC of Internal Combustion Engine	The Car	Information	76
Day In Court	The Driver	Attitude	76

mains that, despite the basic 13, the individual instructor exercised a considerable degree of individuality in his selection of the particular film titles to insert into the pattern of film use.

Because the basic 13 film titles are basic, but not inclusive, Appendix Figures 2 through 29 graphically display instructor applications of the 28 most frequently shown film titles. Appendix Table 2 summarizes instructor application data for the entire 144 titles that received one or more showings.

Problems in Film Selection

A second aspect of the analysis of film titles had to do with their classification as to film type (according to training objective) and as to association with a particular unit of instruction, according to the procedure given in the Appendix on Methodology. Table 6 shows the 144 titles cross-tabulated according to both characteristics. Only 16 of the titles, or 1 in 9, were reported as being considered a combination of more than one film type. This may be concluded to be a rather small proportion of the total. If it be suggested that many films received only one showing, and hence could not possibly be classified as a mixed type, the reader is reminded that among the basic 13 (where there existed the maximum possible opportunity for mixed types to appear) only 1 in 13 was so classified. Only 24 of the titles, or 1 in 6, were reported as being associated with more than one unit of instruction. This number also was concluded by the writer to be relatively small. In other words, the instructors did not appear to have much difficulty in making an unambiguous classification of the vast majority of the film titles they selected for use.

This being the case, the next step of the analysis was to examine the supply, as it were, of selected titles for each unit of instruction. The three units turned out to be the ones which received major emphasis in the pattern of film use, namely, *the driver, driving skills,* and *the car.* For the remaining units of instruction the supply of available titles was thin, to say the least. Thus there appeared to be a high correlation between film title availability and film showings.

It is possible that these three units of instruction are uniquely adapted to supplementation by educational films. If so, it is left to the reader to decide what it is that prevents such units of instruction as *natural laws, traffic law and enforcement,* and *other highway users* from being equally adaptable to film supplementation.

When the supply of selected films was examined from the standpoint of the characteristic of film type, it became possible at last to answer several more of the persistent questions which prompted the survey. It was evident that although the typical pattern of film use included an equal number of showings of each of the three film types, these showings were not related to the relative supply of films. There were 65 information films to choose from, in comparison with 37 attitude films and 26 skills films. In this tabulation also lay the answer as to the question of possible overproduction of attitude films. Unless a disproportionate number of the 106 available titles not selected were attitude films, the supply of attitude films produced appeared not to be excessive.

One criticism, however, could possibly be leveled at the supply of attitude films. Were they not arbitrarily restricted to particular units of instruction? Why, for example, should there be no suitable films produced with the objective of creating or reinforcing suitable attitudes toward *the car* itself? Why should there be only one film produced with the objective of creating or reinforcing desirable attitudes toward driving skills?

In the opinion of the writer there is some justice to the conclusion that existing traffic safety titles being used do not adequately cover the training objectives of the high school course in driver education. An oversupply of titles exists for some units of in-

TABLE 6

FILM TITLES ASSOCIATED WITH UNITS OF INSTRUCTION ACCORDING TO ESTIMATED FILM TYPE

	Estimated Film Type						Total
	Mixed			Single			
	Info.-Att.	Info.-Skills	Other	Information	Attitude	Skills	
The Driver	2	.....	1	5	25	1	34
Driving Skills	.....	.....	1	4	1	20	26
The Car	1	.....	1	23	.....	1	26
Mixed Units	5	.....	2	7	6	4	24
Traffic & Hwy Engineering	.....	.....	.....	10	.....	.....	10
Natural Laws	1	1	.....	3	2	.....	7
Traffic Problem	.....	.....	.....	5	1	.....	6
Traffic Law & Enforcement	.....	.....	.....	5	.....	.....	5
Related Skills	1	.....	.....	2	2	.....	5
Other Highway Users	.....	.....	.....	1	.....	.....	1
Miscellaneous	.....	.....	.....	.....	.....	.....	.....
Total	10	1	5	65	37	26	144

struction, and a severe undersupply exists for others. The supply of attitude films is arbitrarily restricted to only 1 of the 10 customary units of instruction.

Film Needs Reported

The above conclusions were based upon the assumption that a more even distribution of titles among units of instruction and film type would be desirable. This, however, is not necessarily the case. Classroom instructors might feel that only a single film type was needed for some units of instruction. To determine whether this was so, the instructors were asked to report new films that were needed in terms of unit of instruction and specific purpose intended. A total of 146 requests for new film titles was received, according to unit of instruction and specific purpose as cross-tabulated in Table 7.

Apparently the classroom instructors also favor a distribution of films more even than that existing at the time of the survey. Units which appeared particularly slighted in their opinion were *traffic laws and enforcement* (28 requests *vs.* 5 existing titles) and *natural laws* (19 requests *vs.* 7 existing titles). There was less agreement on the need for new titles associated with *other highway users* (3 requests *vs.* 1 existing title) and *miscellaneous* (5 requests *vs.* no existing titles).

A large number of requests were made for new films associated with two units of instruction for which a large number of films already existed: *driving skills* (30 requests *vs.* 26 existing titles) and *the driver* (25 requests *vs.* 35 existing titles).

Clearly, the best bet for a commercial producer of traffic safety films, so far as showings in driver education courses are concerned, was the information film to be associated with *traffic laws and enforcement.* This particular classification received the greatest number of requests. Moreover, because of the few existing titles in this category, there would be little competition. Probably the next best bet indicated was an information film about *natural laws* related to driving that would demonstrate how they affect vehicle and driver performance. Here, too, such a film would have few existing titles with which to compete.

Finally, the concern that classroom instructors had fallen in love with the attitude film to the exclusion of other types appeared laid to rest. The requests, as related to film type, stood 62 for information, 33 for skills, and 16 for attitude. Film producers might also wish to note that driver education courses seem to have a high degree of intrinsic interest, and educational films are not demanded to add interest to the course or introduce or summarize a unit of instruction. Seventy-six percent of all requests dealt with a specific training objective, such as the demonstration of a specific skill, the imparting of particular information, or the development of a particular attitude.

TABLE 7

REQUESTS FOR NEW FILM BY UNIT OF INSTRUCTION ACCORDING TO SPECIFIC PURPOSE INTENDED

	Not Ascertained	Add Interest to Course	Introduce a Unit	Summarize a Unit	Demonstrate Specific Skill	Teach Particular Information	Develop Particular Attitude	Substitute for Other Inst.	Total
Driving Skills	3	6	....	2	12	6	....	1	30
Traffic Laws & Enforcement	1	2	....	1	3	20	1	....	28
The Driver	1	2	....	....	....	8	14	....	25
Natural Laws	4	1	....	....	5	9	....	....	19
The Car	4	3	....	....	5	3	....	....	15
Traffic & Highway Engineering	2	....	....	....	....	7	....	....	9
Traffic Problem	....	....	....	....	1	4	1	....	6
Related Skills	....	....	1	....	4	1	....	....	6
Miscellaneous	....	....	....	....	3	2	....	....	5
Other Highway Users	1	....	....	....	....	2	....	....	3
Total	16	14	1	3	33	62	16	1	146

PART C

Utilization

A frequently given definition of the term *utilize* is "to turn to practical account." The research question of minor importance in the planning of the survey was, "How skillful was utilization?" Were the film showings an occasion during which the students sat in the dark, or were the moving images turned to practical account in terms of the training objectives of the course?

It is generally understood that effective utilization of educational films involves associating the film with a particular unit of instruction, showing it for a well-defined purpose, and directing attention to the film itself or to pertinent portions of it. In addition, the instructor must create the best possible conditions for viewing, in terms of ventilation, location of screen, light level in the room, etc. A more thorough discussion of utilization techniques, their assumed importance, and the measures adapted in this survey is given in the Appendix on Methodology.

After the field work was completed, the writer was requested to examine the data obtained for any possible evidence that the current course organization into ten units of instruction was unsatisfactory. It was thought that if traffic safety films of recognized high quality failed to associate easily with relevant portions of the course as it was then organized, the difficulty might lie with the organization of the course rather than with the films themselves. Here again, the procedure to be followed has been detailed in the Appendix on Methodology.

Skill in Utilization

Analysis of the survey data using indirect methods developed no evidence to the effect that utilization techniques of the average classroom driver education instructor were other than satisfactory. As with any group, it was expected that some individuals would demonstrate excellent ability in film utilization, and that certain others might for various reasons fall short of the average for the group. The analysis employed here was an attempt to evaluate the ability of the entire group. In this analysis the group equalled or surpassed criteria established for adequate completion of the questionnaire, agreement as to the film producer's training objective for each film title, agreement as to unit of instruction associated with each film title, application of a specific utilization technique, and knowledgeable request for needed films.

Of the 2,284 showings for which complete classification in Table 8 was possible, 57 showings were identified neither according to specific training purpose nor according to utilization technique employed. These showings, in addition to oversight or error, represent instances where the rationale of film utilization was not clear to the instructor; he could not complete the questionnaire properly. Altogether, there were 131 showings in which no answer to the question on utilization techniques was given, and 93 showings in which no indication of specific purpose was given. According to the criterion of 90 percent correct answers, the group may be assumed to have demonstrated satisfactory grasp of the utilization rationale, since a total of 228 *no-answers* would have been permitted.

Another indirect measure of the ability of the instructors to utilize educational films satisfactorily was built around the fact that commercial film producers customarily classify their product as to type of training objective. Hence it was assumed that instructors familiar with the rationale of utilization would have little difficulty in agreeing as to what the training objective of each title might be. As indicated in Table 6, only 16 of the 144 selected films, or 11 percent, were not clearly agreed upon as being of a single type. Since the criterion was less than 25 percent disagreement this indirect measure also was assumed to provide evidence of satisfactory skill in utilization.

In a similar manner, ability to decide with which unit of instruction a film title could effectively be

TABLE 8

FILM SHOWINGS BY PURPOSE ACCORDING TO UTILIZATION TECHNIQUE REPORTED

Specific Purpose	No Answer	Focused on Particular Point	Stimulated General Attention	None: Film Self-Explanatory	None: No Time For	Total
No Answer	57	5	6	5	20	93
Add Interest	15	45	38	46	4	148
Introduce Unit	5	133	54	24	2	218
Summarize Unit	6	122	38	26	2	194
Demonstrate Specific Skill	21	314	60	68	1	464
Particular Information	15	274	136	94	12	531
Particular Attitude	12	252	227	111	10	612
Substitute for Other Information	.....	6	7	9	2	24
Total	131	1,151	566	383	53	2,284

associated would also constitute some evidence of skill in utilization. Were the entire group of instructors to demonstrate unanimity in their independent classifications of the respective titles, this would indicate the entire group possessed such skill to a satisfactory degree. As indicated in Table 6, only 24 of the 144 titles, or 17 percent, were not clearly agreed upon as to the single unit of instruction with which they were most clearly associated. Since a criterion of 25 percent or less allowable disagreement had been established, the instructors as a group also passed this indirect test of their skill in utilization.

Perhaps the most pertinent of the tests of utilization skill was based upon their report of how specific titles were employed in instruction. As indicated in the Appendix on Methodology, a skilled instructor would only direct student attention to particular portions of an educational film when he had a specific purpose to accomplish in showing the title. He would not so direct student attention when he wished to introduce or summarize a unit of instruction or to add interest to the course. Following the procedure indicated in the methodology, a chi-square test was computed having the value $X^2 = 102.68$, when $X^2.99 = 10.8$[1]. Here again, the instructors as a group met the test to a satisfactory degree.

Finally, the statements of the classroom instructors as to teaching objectives "for which no film exists, but where one is needed" were examined. If the group as a whole could indicate where they felt educational films were needed by defining such points in terms of unit of instruction and specific purpose for showing, they would indicate another aspect of skill in utilization. Further, if a sufficient number of these points of need were located where a current shortage of films was indicated (shortages determined only after analysis of another portion of the same questionnaire), this would constitute additional indirect evidence of the utilization skill of the instructor group. The need of a new title to teach particular information about *traffic laws and enforcement* is a case in point. To be acceptable as a valid indication of film needs, this recommendation by the instructors must also be acceptable as evidence of their skill in film utilization.

Since the classroom instructor group exceeded or equalled all the criteria established as an indirect assessment of their skill in film utilization, it was concluded that they could be considered as possessing satisfactory skill in this regard. However, this conclusion does not indicate that such skill is extraordinarily high. On the contrary, the best evidence of skill, pertaining to the utilization techniques associated with purpose for showing, does not present an entirely reassuring picture. Although the chi-square statistic indicates the instructor group followed research-approved procedures to a better-than-chance degree of statistical significance, the practical extent of such approved procedures was not great. Out of 2,019 showings directed toward a particular (rather than general) purpose for showing, 924 failed to use the technique of focusing attention on particular points to be learned.

Course Organization and Utilization

The additional question raised after the field work had been completed referred to the adaptability of the current organization of the course to supplementation with educational films. Since the survey was not designed with this question in mind, the evidence relating to it was at best tangential. Table 6 indicates that only 17 percent of the total selected films were not classified as related to a single unit of instruction, a figure well within the criterion of not more than 25 percent mixed classifications. For this to occur, it was necessary that a) films actually apply to a particular unit of instruction, and b) the instructor group have sufficient skill in judging such instructional materials to recognize that fact.

Since the criterion was well exceeded, one must assume that both *a)* and *b)* above existed. Therefore, the present survey presents no evidence that current organization is inadequate to the extent that it prevents relevant association of educational films. Beyond this statement the data cannot go.

[1]Helen Walker and Joseph Lev, *Statistical Inference* (New York: Henry Holt, 1953), p. 100.

PART D

Summary with Conclusions and Recommendations

Summary

Educational film use for Michigan driver education classes was probably above the national average, with showings in 73 percent of Michigan classes in the spring of 1959, compared with showings of 55 percent nationally in the spring of 1958. Michigan classroom instructors who used film reported an average of ten showings, with major emphasis for units pertaining to *driving skills, the driver,* and *the car,* and with minor emphasis for *the traffic problem* and *traffic laws and enforcement.* The remaining units of instruction also received film treatment, but they had a minimal number of showings. Educational films were used for several training objectives, as frequently to impart information and to demonstrate skills as to shift or reinforce attitudes.

School size, rather than geographical location, was related to frequency of showing, with more instructors in larger schools using films than in smaller schools. In the class of schools with lowest total enrollment the frequency of showings declined even for those instructors who used educational films.

A relatively small number of the available traffic safety films were shown in driver education courses. Of approximately 250 film titles, only 144 were shown at all, receiving a total of 2,286 reported showings. A basic 13 film titles accounted for 57 percent of all showings. The classroom instructors reported that 1 showing in 10 was a repeat, frequently in connection with a different unit of instruction. The title reported shown most frequently was "Driving in the City," a skills film. Next was "The Case of Officer Hallibrand," an attitude film. The title reported shown most frequently to impart information (with over-all rank of fifth) was "The ABC of the Automobile Engine."

Certain units of instruction had a great many related film titles, such as *the driver, driving skills,* and *the car,* while the others had very few or none at all. No single unit of instruction was reported to have a balanced selection of titles available for obtaining various training objectives. For example, there were 23 titles of information films considered acceptable for showing with the unit *the car,* but not one title was reported as used for shifting or reinforcing attitudes toward this area of training. According to reports of classroom instructors, the two units of instruction most deficient in film availabilities were *traffic laws and enforcement* and *natural laws.* There were also requests for improved or supplementary films in other training areas. Of the statements pertaining to the need for new films, only 24 percent indicated a purpose of general interest; the remaining 76 percent requested films to impart particular information, demonstrate a specific skill, or develop a particular attitude.

Indirect evidence did not disprove the assumption that the majority of classroom instructors were utilizing educational films satisfactorily in driver education classes. They demonstrated reasonable grasp of utilization rationale by successfully filling out a fairly complicated questionnaire, by high agreement as to the training objectives the producers had for the various films, by reporting a practice of utilization in

harmony with research findings, and by their requests for needed films.

Organization of the driver education course into the currently accepted units of instruction appears adequate, when judged solely by film evidence. Disagreement as to the classification of title with a particular unit of instruction occurred in only 1 film in 6, and did not appear at all among the basic 13. Had the instructors disagreed on the most appropriate classification of film titles according to unit of instruction in more than 1 case in 4, this might have indicated film producers had undue difficulty in producing titles related to only one unit of instruction.

Conclusions and Recommendations

It was concluded that classroom instructors in Michigan high schools made substantial use of educational film as a training material in driver education courses. It is recommended that the classroom instructors take steps to improve their currently adequate ability to utilize these films effectively.

It is recommended that producers of educational films related to driver education study this report with care. Several units within the course of instruction lack a satisfactory number of titles, which might be produced with profit. Recommendations of the classroom instructors regarding needed films should be carefully examined. Particularly in the area of driver education, films may be produced with the clearly defined objectives of presenting information, demonstrating a skill, or shifting or reinforcing an attitude. If the films are so labeled as to objective in announcements to the public regarding availability, the number of showings will probably be greater therefrom. The reports of film showing, for every title reported used as given in Appendix Table 2, should be examined to determine if the film is being used with the unit of instruction and for the training objective for which the producer intended it.

It is recommended that the Michigan State University Highway Traffic Safety Center, or another appropriate organization, assist the classroom instructors in effective film utilization by expanding the announcement and description of new film titles in such publications as the *Highway Traffic Safety Newsletter*. It is also recommended that a continuing series of brief regional workshops in driver education audio-visual training techniques be instituted, during which both practice driving and classroom instructors will preview outstanding new titles. During the workshop means of effectively tying the film materials into the course should be discussed. Certain films should be evaluated by the workshop members, perhaps by means of Behavioral and Factual Analysis techniques[1].

[1]L. C. Twyford *et. al.*, "Behavioral and Factual Analysis," *Audio-Visual Communications Review*, VII (1959), p. 182-92, and I. R. Merrill and H. H. McAshan, "Predicting Learning, Attitude Shift and Skill Improvement from a Traffic Safety Film," *Audio-Visual Communications Review*, In Press.

SECTION II

Reference

Methodology

Problem

The high school driver education program in Michigan became effective February 1, 1957, as an integral part of a concerted drive to reduce traffic fatalities and accidents throughout the state. The Michigan Driver Education Law has three outstanding features. They are:

> No person under the age of 18 may be licensed to drive on Michigan highways unless he has passed an approved course in driver education.
>
> Driver education is made available to every person under the age of 18 without tuition or fees. This includes all public, private, parochial, and out-of-school youth.
>
> The high school driver education course is required by the Superintendent of Public Instruction to consist of 30 classroom hours and a minimum average of 6 hours of practice driving.

A certain proportion of fees from the Michigan Drivers License Program is provided to support high school driver education courses[1].

As indicated in the syllabus as suggested by the Department of Public Instruction, the objectives of the course are not limited to training the student how to start, stop, back, turn, park, pass, and signal properly[2]. Any instructional objectives may be classified in terms of intended behavior[3]. Statement of the course objectives in these terms will also serve as a brief definition of the units of instruction suggested within the syllabus, the titles of which are underlined. In addition to the psycho-motor *driving skills* indicated above, the student is expected, within the cognitive domain, to gain a rudimentary knowledge of *traffic and highway engineering*, comprehension of the physical requirements and social responsibilities of *the driver*, ability to apply to the driving situation both the operation of *traffic laws* and such *natural laws* as friction and gravity, to analyze some aspects of the mechanical function of *the car* and the effect of his performance as a driver upon *other highway users* such as pedestrians and cyclists, and finally, to evaluate these aspects as part of the total *highway problem*.

In addition, within the affective domain, the driver education instructor has the objective of developing attitudes and values, not only toward driving itself, but also toward many of the elements indicated as units of instruction.

This subject matter is always presented by the high school to a group of students, and the method of instruction is either the class method or the laboratory method. Throughout this report, the term *classroom instruction* in driver education programs refers to those learning experiences which are provided elsewhere than in the motor vehicle. The techniques of instruction employed include lecture, group discussion, and demonstration. In addition to educational films, instructional materials used by driver education classroom instructors include film strips, projected slides, traffic boards, automobile parts models, teaching

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[1]Act 260, *State of Michigan, Public Acts of 1959*, and "Michigan Driver Education Manual," *Michigan Department of Public Instruction*, Bulletin No. 360 (1956).

[2]"Mich. Driver Educ. Manual."

[3]B. S. Bloom (ed.), *Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain* (New York: Longmans, Green, 1956), p. 12.

charts, engine models, and psychophysical devices. The latter are used to check reaction time, field of vision, visual acuity, distance judgment, and color discrimination.

The laboratory method is used to give students the opportunity to develop psycho-motor skills and to apply them in synthesis with knowledge presented during classroom discussion. Throughout this report, the term *practice driving* instruction refers to learning experiences in driver education provided for the student as an observer and student-driver in a motor vehicle. These definitions are consistent with those of the National Commission on Safety Education[4].

Commercial motion picture producers of films designed for the purpose of learning customarily describe them in terms of their training objective as *instructional, motivational, or demonstrational*[5]. Such objectives are most relevant to the driver education course, as indicated above. Pretesting of the schedule indicated that classroom instructors customarily refer to these classifications in similar terms. An *information film* is one designed to impart knowledge. An *attitude film* is one designed to motivate the viewer or to reinforce or shift his attitude. A *skills film* is one designed to demonstrate how to perform one or more of the driving skills. Because these terms are most meaningful to driver education instructors, and acceptable to most other readers of this report, they are used in preference to other similar terms. A more general term used herein is that of *educational film,* which refers to all motion pictures having the objective of imparting knowledge, shifting attitudes, demonstrating skills, or any combination thereof. *Traffic safety films* are a type of educational film classified according to subject matter. This classification is somewhat broader than high school driver education alone, including, for example, traffic safety films for informal adult education.

The term *utilization* refers to the technique of film presentation, and is generally considered to involve the preparation of students to view the film and a careful follow-up. It is widely held that careful planning can nearly double the effectiveness of an educational film in terms of the information acquired by the students who see it[6]. Some frequently advocated principles of utilization are: 1) Ability level. The best results are obtained with students who are capable of understanding the film content. 2) Curriculum context. The best results are obtained when a film is used in context with the subject taught and the unit of instruction. 3) Instruction before showing. The best results are obtained when students have received prior instruction on the content of the film and the purpose for seeing it and have been given a mental set to learn from it. 4) Participation periods at intervals during showing. Learning is increased if the film is stopped for practice or test questions. 5) Instruction after showing. Increased knowledge results from clarifying obscure points in the film and from answering questions left unanswered by the film[7].

An interesting finding by May and Lumsdaine in regard to utilization pertains to the benefits obtained from instruction before, during, and after showing. It seems these principles are effective only if the classroom instructor shows the film in phase with the appropriate unit of instruction, and also wishes to demonstrate a specific skill, teach particular information, or develop a particular attitude. If, however, he wishes to add interest to the course in general, introduce or summarize a unit of instruction, or merely substitute the film for other instruction, as on a day when roads are too icy for practice driving, then such utilization techniques do not appear to add very greatly to the amounts learned from the film on the whole[8].

With these considerations in mind, it was possible to turn to the general aim of the research project, that of describing how educational films were used in Michigan to accomplish objectives of high school driver education courses. As indicated in the Preface, it was decided this aim could best be accomplished by measuring the amount of film use, determining the film titles involved, and evaluating indirectly the skill employed in their utilization. Such a procedure was intended to answer the following questions:

1. What was the pattern of educational film use?
    a. Did the number of film showings differ in the Upper Peninsula from that in the rest of Michigan?
    b. Did school size affect the number of film showings?
    c. For what general educational objectives were films shown?
    d. With what units of instruction were films used as instructional materials?

[4]Key, *op. cit.*, p. 2.

[5]M. A. May and A. A. Lumsdaine, *Learning from Films* (New Haven: Yale University Press, 1958), p. 4.

[6]W. A. Wittich and C. F. Schuller, *Audio-Visual Materials and Their Use* (2nd ed.; New York: Harper and Brothers, 1957) p. 404.

[7]May and Lumsdaine, *op. cit.*, p. 310.

[8]Ibid., p. 317.

2. What film titles were used?
   a. What proportion of the available film titles received at least one showing?
   b. How did the titles shown vary in frequency of showings?
   c. With what unit of instruction and general educational objective was each title related?
   d. What course objectives did currently available titles fail to satisfy?
3. How skillful was film utilization?
4. Did the applicability of educational films suggest any need or desirability of a revised course organization into different units of instruction?

Method

Since the information desired was not available from other sources, it was necessary to employ the survey method and contact the driver education instructors themselves. The technique of data collection adopted was that of the mail questionnaire. At the time the study was planned, no information was available as to the percentage of replies which might be received from the respondents. Therefore, it was decided to conduct a census of all high school driver education instructors. The Highway Traffic Safety Center supplied a list of 1,228 persons which was said to include all such instructors in Michigan as of the beginning of the fall semester of the 1958-59 school year.

Field work was initiated with the mailing on May 21, 1959. By June 10, a response of 35 percent had been achieved. A follow-up letter was mailed June 10 to respondents whose replies had not been received by that date. Enclosed was a stamped addressed postcard for respondents to indicate summer address and willingness to complete questionnaire if the previous one had not been received or had been lost. This mailing brought in an additional 8 percent immediately, and requests for enough second mailings of questionnaires to bring the final number of replies to 547, for a 45 percent return.

Subsequent to the field work, a report of a national survey of driver education courses was issued. This national survey did not investigate applications of educational films, since it was focused on the driver education program as a whole. It was directed to a sample of school organizations, rather than individuals, and it had the official support of the NEA. Under such conditions a return of 51 percent was received. Field work for the national survey had been conducted during the spring of 1958[9]. When the differences between the two surveys are considered, the percentages of response are assumed to be comparable.

Appendix Table 1 gives the distribution of the 547 replies according to school size, geographical location, and type of driver education instruction performed. The internal consistency between number of replies from varying classes of schools in the Upper and Lower Peninsula of Michigan should be noted. Either the response is representative of the population, or the response bias is uniform between the two geographical locations.

The reader is cautioned that criteria were not established against which the validity of the survey returns could be compared. This is a shortcoming of the study, due in part to the amount of funds available to this project. Alone among the 11 types of validation criteria mentioned by Parten which could be applied was that of common sense[10]. Michigan State University faculty members who taught the course in driver education reported the data on extent of film use disclosed by analysis corresponded to impressions gained by visits to the field for conferences with driver education instructors. Upon this slim evidence of validity, the analysis proceeded.

Appendix Figure 1 shows the questionnaire as finally adopted after pretesting several earlier versions. It was partially pre-coded, so that information could be easily transferred to Hollerith cards, one card for each questionnaire providing data pertaining to the amount of educational film use. Separate cards were made for each showing of each film for each instructor in order to answer questions about what film titles were used. Each deck was used to answer certain questions about skill in film utilization.

After the extent of film use was determined from the replies, analysis proceeded to discover the independent variables of which the dependent variable of film showings was a function. Geographical location and school size were obtained by reference to a school directory[11]. They were checked against postmark and instructor comments upon the questionnaire. Unit of instruction, specific purpose of showing film, utilization technique, and estimated purpose of film producer were obtained directly from the questionnaire. The

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[9]Key, *Loc. cit.*

[10]Mildred Parten, *Surveys, Polls, and Samples* (New York: Harper and Brothers, 1950), p. 494.

[11]"Directory Issue, 1958-59 School Year," *Michigan High School Athletic Association Bulletin*, XXXV (1958), 194-228.

presentation of such functional relationships as they pertain to extent of film use and film titles used is straightforward, and needs no explanation.

The procedure followed in arriving at a classification of a particular title as related to a single unit of instruction received considerable attention. It was decided that all relevant showings would be included, which meant that a particular title might have only 1 or as many as 142. In the absence of justification for a more precise criterion, a numerical majority of the showings was necessary for classification as associated with a single unit of instruction. Instances of showings for which no unit of instruction was indicated were included in the total, on the basis that a *no-unit voted* might indicate the film was considered related to the course as a whole, rather than to any particular unit.

The same procedure was followed in the classification of the type of film title according to the instructor estimate of the producer's training objective. In this case, however, the *no-type-voted* responses were omitted, because the question was of the forced-choice variety, designed to indicate whether the instructor considered it to be primarily information, attitude, or skills.

Inasmuch as the evidence regarding skill in film utilization is indirect, some comment is in order. Evidence of acceptable skill in utilization was assumed to be the equalling of criteria on five different but related indirect measures. Failure to reach the criterion on any one of the measures would cast grave doubt upon the skill of the group of classroom instructors in film utilization. These measures were: 1) adequate completion of the questionnaire, 2) agreement as to film producer's training objective for each film title, 3) agreement as to unit of instruction related to each film title, 4) application of a specific utilization technique, and 5) request for needed films.

Failure adequately to complete the questionnaire would indicate a lack of understanding of the rationale of film utilization. It was established in advance that if unit of instruction and specific purpose were indicated for 90 percent of the film showings, the criterion would be reached. This was considered reasonable since space was provided for writing in additional units of instruction, and the list of specific purposes was exhaustive.

Agreement as to producer's training objective for the film assumed that if the group possessed a reasonable sophistication as to utilization it should be able collectively to agree upon what objective the film producer had in mind for a particular film title. Allowing for a certain amount of actual ambiguity as to film objectives, but considering a forced choice was called for, the criterion was established as agreement for 75 percent of the film titles.

Agreement as to unit of instruction, for similar considerations, was also established as agreement for 75 percent of the film titles.

The specific utilization technique to be applied referred to the finding by May and Lumsdaine reported above. The question to be asked was, "Did classroom instructors use instruction before, during, or after showing when they wished to call attention to specific skills, particular information, or develop particular attitudes?" A contingency table was established, coding utilization techniques as *1 vs. not 1,* and specific purpose as *no answer, 1, or 7 vs. other,* which was tested by the chi-square test of independence[12]. See Appendix Figure 1 for the meaning of codes on the questionnaire.

Requests for needed films were to be evaluated by the ability of the classroom instructors to state the unit of instruction and specific purpose of films that were needed, and by recommendations for films where obvious gaps, if any, occurred, both as to unit of instruction and major training objective.

Turning to the objective added after field work for the survey had been completed, little could be done. If the respondents demonstrated adequate skill in utilization, then no evidence would exist that the present course organization was other than reasonably satisfactory, because it would mean that in the instructors' minds both film titles and course content formed a consistent pattern. On the other hand, were the instructors in agreement over the producer's objective for the film title and in disagreement as to the related unit of instruction for more than 25 percent of the titles, the possibility would be raised that present course organization might be such that producers were unable to prepare a coherent film clearly relating to only one of the units. The data could do no more than to raise this possibility.

[12]Walker and Lev, *op. cit.*, p. 100-1.

APPENDIX TABLE 1

Number and Percent of Respondents According to Location and Type of Instruction

	Not Ascertained	Upper Peninsula		Lower Peninsula		Total	
	No.	No.	%	No.	%	No.	%
Total Replies.....	7	50	100	490	100	547	100
Class of School							
Class A.....	.....	.....	.....	210	43	.....	.....
Class B.....	.....	21	42	108	22	.....	.....
Class C.....	.....	13	26	105	21	.....	.....
Class D.....	.....	9	18	67	14	.....	.....
Class E.....	.....	7	14	.....	.....	.....	.....
Type of Instruction							
Taught Classes...	3	24	48	254	52	281	51
Practice Driving Only.....	0	16	32	112	23	128	23
Not Teach Spring Semester.....	2	10	20	112	23	124	23
Not Ascertained..	2	.....	.....	12	2	14	3

APPENDIX TABLE 2

FILM TITLES REPORTED SHOWN IN SPRING, 1959, MICHIGAN HIGH SCHOOL DRIVER EDUCATION CLASSES, ACCORDING TO UNIT, TYPE, WEEK SHOWN, CHOICE, AND TOTAL SHOWINGS

TITLE	UNIT	TYPE	WEEK SHOWN									CHOICE			TOTAL SHOWING
			1st and 2nd	3rd and 4th	5th and 6th	7th and 8th	9th and 10th	11th and 12th	13th and 14th	15th and 16th	17th and 18th	1st Choice	Substitute	Not Ascertained	
ABC of Auto Lubrication	The Car	Information	....	3	1	3	3	1	....	....	....	7	4	1	12
ABC of Combustion	The Car	Information	....	1	1	1	....	....	....	....	....	3	....	....	3
ABC of the Automobile Engine	The Car	Information	22	21	13	7	1	3	3	7	1	97	6	3	106
ABC of the Diesel Engine	The Car	Information	....	....	....	....	....	....	....	....	....	1	....	....	1
ABC of the Internal Combustion Engine	The Car	Information	12	22	13	3	1	1	1	7	....	66	7	3	76
A Car Is A Woman	The Car	Information	....	....	....	1	....	....	....	1	....	3	....	....	3
Accident Behavior	Mixed	Attitude	....	....	....	....	....	....	2	1	....	3	....	....	3
According to the Record	The Driver	Attitude	3	2	5	2	2	3	....	2	6	35	....	2	37
A Closed Book	The Driver	Attitude	....	....	3	....	....	4	1	....	....	8	....	....	8
A Day in Court	The Driver	Attitude	13	12	6	4	7	5	5	2	2	68	5	3	76
Alias the Killer	Related Skills	Attitude	....	....	....	....	....	....	....	....	....	1	....	....	1
All of a Sudden	The Driver	Attitude	....	4	4	4	8	....	....	....	....	16	7	....	23
American Road	The Traffic Problem	Information	22	1	....	1	....	1	2	1	1	30	2	2	34
An Equation for Progress	The Car	Information	....	....	....	....	....	....	....	1	....	1	....	....	1
And Then There Were Four	The Driver	Attitude	22	14	5	11	9	6	3	2	2	85	5	7	97
Asking for Trouble	Related Skills	Attitude	....	....	....	....	....	....	....	....	....	....	1	....	1
A Thing of Beauty	The Car	Mixed: I-A	1	....	....	....	....	....	....	....	....	1	1	....	2
Automatic Transmission	Mixed	Information	10	14	5	5	1	2	....	....	1	38	5	2	45
Automobile Changes and Safety	The Car	Mixed: Other	....	....	....	....	....	....	....	....	....	....	....	....	1
Automobile Crash Injury Research	Mixed	Information	....	....	....	....	....	....	....	....	2	2	....	....	2
Basic Principles of Lubrication	The Car	Information	3	2	1	1	....	....	....	1	....	10	1	....	11
Billy Graham	The Driver	Attitude	....	....	....	....	....	....	....	1	....	1	....	....	1
Birthright	Driving Skills	Information	1	....	....	....	....	....	....	....	....	1	....	....	1
Body Bountiful	The Car	Information	....	1	....	....	....	....	....	1	....	3	....	....	3
Borrowed Power	The Driver	Attitude	2	7	....	....	1	....	1	2	....	14	1	....	15
Building a Highway—Roadbuilding	Traffic & Highway Engineering	Information	....	1	....	....	....	....	....	....	....	3	....	1	4
Bus Driver	The Driver	Information	....	....	....	....	....	....	....	....	....	1	....	....	1
Care of the Car	The Car	Information	2	7	7	8	3	1	6	1	4	50	3	5	58
Case of Officer Hallibrand	TheDriver	Attitude	19	20	17	14	8	7	5	3	10	124	4	5	133
Casualty Insurance	Traffic Laws & Enforcement	Information	....	....	....	....	1	....	....	....	....	1	....	....	1
Chain Reaction	The Driver	Attitude	2	6	3	1	2	....	1	....	....	18	....	....	18
Change for the Better	Mixed	Mixed: I-A	....	....	....	....	....	1	....	....	....	2	....	1	3
Competition Drivers	Driving Skills	Information	....	....	....	....	1	....	....	....	....	1	....	....	1
Cool Hot Rod	Mixed	Attitude	3	....	....	....	2	....	....	....	....	8	2	....	10
Crash and Live	Mixed	Information	2	1	4	3	1	....	2	2	2	17	1	3	21
Crash Research	Natural Laws	Information	....	....	....	....	....	....	....	....	....	1	....	....	1
Death on the Highway	The Driver	Attitude	3	1	....	....	....	1	....	....	2	12	....	....	12
Delinquent Dad	The Driver	Attitude	....	....	....	....	1	....	....	....	....	1	....	....	1
Diesel: The Modern Power	The Car	Information	....	....	....	....	....	....	....	....	....	1	....	....	1
Don't Skid Yourself	Natural Laws	Mixed: I-S	1	2	1	8	....	....	....	1	....	14	3	1	18
Driving at Night	Driving Skills	Skills	8	13	9	8	12	7	5	8	1	85	3	7	95
Driving Attitudes	The Driver	Mixed: Other	....	....	....	....	....	....	....	....	....	....	....	....	1
Driving Economically	The Car	Information	....	5	9	....	....	....	4	2	2	27	3	5	35
Driving in the City	Driving Skills	Skills	10	19	21	23	11	8	7	3	1	123	6	13	142
Driving in the Country	Driving Skills	Skills	....	1	1	....	....	....	....	....	....	5	....	....	5
Driver Irritations	Mixed	Information	4	....	....	....	....	....	....	....	1	5	....	....	5
Driving on the Highway	Driving Skills	Skills	12	18	25	10	8	4	8	6	2	107	6	10	123
Driving Training: Advanced Turning Movements	Driving Skills	Mixed: Other	....	....	....	....	....	....	....	....	....	....	....	....	1
Driving under Adverse Conditions	Driving Skills	Skills	10	15	22	15	11	4	7	4	2	104	8	7	119
Drunk Driving	The Driver	Attitude	1	....	....	....	4	1	....	....	....	6	....	....	6
Fatal Seconds	The Driver	Attitude	3	1	2	....	....	....	2	....	....	8	1	1	10
Firebird II	The Car	Information	....	....	....	....	....	....	....	1	....	1	....	....	1
Freedom of the American Road	Traffic & Highway Engineering	Information	3	5	4	....	1	3	....	1	5	22	1	1	24
Freeway Driving	Mixed	Mixed: Other	....	....	1	1	....	....	....	....	....	2	....	1	3

APPENDIX TABLE 2, *Continued*

Title	Unit	Type	Week Shown									Choice			Total Showing
			1st and 2nd	3rd and 4th	5th and 6th	7th and 8th	9th and 10th	11th and 12th	13th and 14th	15th and 16th	17th and 18th	1st Choice	Substitute	Not Ascertained	
Gasoline Development	The Car	Information	....	1	....	....	....	....	....	....	....	1	....	....	1
Gasoline's Amazing Molecules	The Car	Information	....	....	....	....	....	....	....	....	....	3	....	....	3
Give Yourself the Green Light	Traffic & Highway Engineering	Information	1	1	4	....	....	4	1	2	1	18	....	1	19
Highway by the Sea	Traffic & Highway Engineering	Information	....	....	....	....	....	....	....	....	....	1	....	....	1
Highway Hearing	The Driver	Mixed: I-A	....	....	....	....	1	....	....	....	....	2	....	....	2
Highway Safety	Mixed	Skills	....	....	....	....	....	....	....	....	....	....	....	....	1
Home at the Wheel	Driving Skills	Skills	5	4	3	1	3	1	5	....	....	29	2	....	31
How to Drive on Snow and Ice	Driving Skills	Skills	....	4	....	1	3	1	2	....	....	13	....	....	13
Human Factors in Driving	The Driver	Attitude	....	....	....	....	....	....	....	1	....	1	....	....	1
Incredible Journey	The Driver	Attitude	....	....	....	....	....	....	....	....	....	1	....	....	1
Invisible Killer	Mixed	Mixed: I-A	....	....	1	....	....	....	....	....	....	2	....	....	2
Joe Doaks	Natural Laws	Information	....	....	....	....	....	....	....	....	....	....	1	....	1
Know Your Car	The Car	Information	....	....	....	....	....	....	....	....	....	....	1	....	1
Last Date	The Driver	Attitude	3	....	6	5	2	6	1	....	....	26	....	....	26
Learning to Pass	Mixed	Skills	....	....	....	1	....	....	....	....	....	1	....	....	1
Lest We Forget	Mixed	Information	1	....	....	....	....	....	1	1	1	5	....	....	5
Live and Let Live	Traffic Laws & Enforcement	Information	....	3	2	....	....	....	....	....	1	7	....	....	7
Longest Mile	The Traffic Problem	Attitude	....	....	1	....	....	....	....	....	....	....	1	....	1
Look Who's Driving	The Driver	Attitude	....	8	4	....	2	....	1	4	....	19	2	....	21
Lubricating Oil's Amazing Molecules	The Car	Information	....	....	....	....	1	....	....	....	....	2	....	1	3
Mickey's Big Chance	The Driver	Attitude	1	....	1	....	....	....	....	....	....	1	1	....	2
Midwest Holiday	Related Skills	Information	....	....	....	....	1	....	....	1	1	3	....	....	3
More Power for You	Traffic & Highway Engineering	Information	....	....	....	....	....	....	....	....	....	1	....	....	1
Motor Mania	The Driver	Attitude	1	5	1	....	....	....	....	1	....	9	....	....	9
Motors, Boats, and People	Related Skills	Information	....	....	....	....	....	....	....	1	....	1	....	....	1
Mr. Finley's Feeling	The Driver	Attitude	....	....	....	1	....	....	....	....	....	....	1	....	1
Multiple Lane Highway	Traffic & Highway Engineering	Information	....	2	....	....	....	....	....	....	....	2	....	....	2
No License to Kill	The Driver	Attitude	....	1	1	....	....	....	....	....	....	4	....	....	4
None for the Road	The Driver	Attitude	1	....	....	....	....	....	....	....	....	2	....	....	2
Not Around the Block	The Driver	Information	....	....	1	1	....	....	....	....	....	5	....	....	5
Officer Bruce Reporting	Driving Skills	Skills	....	....	....	....	....	....	....	....	....	1	....	....	1
On Impact	Natural Laws	Information	....	....	....	2	1	1	....	3	1	14	....	1	15
Our American Crossroads	The Traffic Problem	Information	3	....	....	....	....	1	....	....	....	9	....	....	9
Parallel Parking	Driving Skills	Skills	....	....	1	....	2	....	....	....	....	4	....	....	4
Parking the Car	Driving Skills	Skills	8	11	11	9	11	9	2	5	3	79	1	10	90
Passing Fancy	Driving Skills	Skills	....	8	4	4	4	1	4	....	1	29	6	1	36
Pedestrians	Other Highway Users	Information	1	5	6	8	4	4	2	5	....	36	4	3	43
Perfect Crime	Mixed	Mixed: I-A	....	2	....	....	....	....	....	....	....	2	....	....	2
Periodic Check-Up	The Car	Information	....	3	....	....	3	....	....	....	....	....	6	....	6
Power Under Control	Driving Skills	Attitude	....	....	....	2	....	....	....	....	....	2	....	....	2
Practice Makes Perfect Drivers	Driving Skills	Skills	5	4	2	....	2	....	....	....	1	16	....	2	18
Production Engineering	The Car	Information	....	....	....	3	....	....	....	....	....	....	3	....	3
Professional Portrait (Truck Drivers)	The Driver	Skills	1	1	5	....	....	....	1	2	....	11	....	....	11
Recognizing Road Hazards	Driving Skills	Attitude	....	....	1	....	....	1	....	....	2	4	....	....	4
Road Ahead	Traffic & Highway Engineering	Information	....	....	....	....	....	....	....	3	....	3	....	....	3
Robert's Communication Newsreel	Traffic & Highway Engineering	Information	....	....	....	....	....	....	....	....	1	1	....	....	1
Rocking the Car	Driving Skills	Skills	....	....	....	....	1	....	....	....	....	1	....	....	1
Safe As You Think	Mixed	Attitude	1	1	2	1	1	....	....	....	....	10	....	....	10
Safe Driving: Advanced Skills and Problems	Driving Skills	Skills	....	1	2	2	....	....	....	....	....	7	....	1	8
Safe Driving: Car Maintenance and Care	The Car	Information	....	....	1	2	1	1	....	....	....	4	....	1	5
Safe Driving: Defensive Driver	Mixed	Mixed: Other	1	1	5	2	2	3	....	....	4	16	4	1	21

APPENDIX TABLE 2, *Concluded*

FILM TITLES REPORTED SHOWN IN SPRING, 1959, MICHIGAN HIGH SCHOOL DRIVER EDUCATION CLASSES, ACCORDING TO UNIT, TYPE, WEEK SHOWN, CHOICE, AND TOTAL SHOWINGS

TITLE	UNIT	TYPE	WEEK SHOWN									CHOICE			TOTAL SHOWING
			1st and 2nd	3rd and 4th	5th and 6th	7th and 8th	9th and 10th	11th and 12th	13th and 14th	15th and 16th	17th and 18th	1st Choice	Substitute	Not Ascertained	
Safe Driving: Fundamental Skills	Driving Skills	Skills	7	3	1	....	....	....	....	....	....	12	....	....	12
Safe Driving: Streets and Highways	Mixed	Information	....	4	1	....	1	....	....	....	....	6	....	1	7
Safe Driving: Techniques of Skilled Driver	Driving Skills	Information	....	1	....	....	2	2	....	....	3	9	....	....	9
Screw Drivers and Screw Jays	Mixed	Mixed: I-A	1	....	....	....	....	1	....	....	....	2	....	....	2
Signs of Life	Traffic Laws & Enforcement	Information	....	....	....	....	....	....	....	1	....	1	....	....	1
Six Deadly Beliefs	The Driver	Attitude	....	....	1	....	....	....	....	....	....	1	....	....	1
Six-Teens Program No. 1	The Traffic Problem	Information	....	....	....	....	1	....	....	....	....	1	....	....	1
Smith System of Non-Accident Driving	Driving Skills	Skills	9	19	8	4	11	5	4	3	3	77	2	4	83
Sound Driving Practice	The Driver	Information	....	1	....	....	....	....	....	....	....	1	....	....	1
Speed and Reflexes	Natural Laws	Information	1	....	....	....	....	....	....	....	....	1	....	....	1
Split Seconds	The Car	Skills	....	....	....	....	....	....	....	....	....	1	....	....	1
State Troopers	Traffic Laws & Enforcement	Information	....	....	....	1	1	1	....	1	1	6	....	....	6
Steering, Signalling and Braking	Driving Skills	Skills	....	....	....	....	....	....	....	....	....	1	....	....	1
Stock Car Racing	Driving Skills	Information	3	....	....	....	....	....	....	....	....	3	....	....	3
Stylist	Traffic & Highway Engineering	Information	....	....	....	....	....	....	1	....	....	1	....	....	1
Talking Car	The Driver	Information	....	3	....	....	....	....	....	....	....	3	....	....	3
Teach Them Now	Related Skills	Mixed: I-A	....	....	....	....	....	....	....	....	....	2	....	....	2
Technique for Tomorrow	Traffic & Highway Engineering	Information	....	....	....	....	....	....	1	....	....	1	....	....	1
Teenicide	Mixed	Attitude	....	3	....	....	....	....	1	....	....	4	....	....	4
Test Drivers	Driving Skills	Skills	....	....	....	....	....	....	....	....	....	....	1	....	1
Those Early Years	The Traffic Problem	Information	1	....	....	....	....	....	....	....	....	1	....	....	1
Tomorrow Meets Today	The Car	Information	....	....	....	3	....	....	....	....	....	....	3	....	3
Tomorrow's Drivers	The Driver	Mixed: I-A	1	....	1	....	....	....	....	....	....	4	....	....	4
Traffic Officer in Court	Traffic Laws & Enforcement	Information	....	....	....	1	....	....	....	....	....	1	....	....	1
Traffic with the Devil	The Driver	Attitude	....	....	....	3	....	....	....	4	....	7	....	....	7
Uniform Traffic Laws	Natural Laws	Attitude	....	....	....	1	....	....	....	....	....	....	1	....	1
Weakest Link	The Driver	Information	1	....	....	....	....	....	....	....	....	1	....	....	1
We Drivers	The Driver	Attitude	13	16	11	9	8	2	2	1	1	68	11	1	80
What's Your Driver Eye-Q?	Mixed	Skills	1	4	1	....	2	....	....	1	3	15	....	....	15
Where Mileage Begins	The Car	Information	4	4	....	2	....	....	3	1	....	17	2	1	20
Why of Lubrication	The Car	Information	2	1	....	1	....	....	1	....	....	5	1	....	6
Winter Driving	Driving Skills	Skills	....	2	....	....	1	....	....	....	....	3	....	....	3
Word of Honor	The Driver	Attitude	....	....	....	....	....	....	1	....	....	1	....	....	1
You Bet Your Life	The Traffic Problem	Information	....	....	....	3	....	....	....	....	....	4	....	1	5
You Can't Stop on a Dime	Natural Laws	Attitude	....	....	....	....	....	....	....	....	....	1	....	....	1
Your Driving Habits	Driving Skills	Skills	2	....	....	....	1	....	....	....	....	4	....	....	4
You're Driving 90 Horses	Mixed	Mixed: I-A	....	4	3	....	....	1	....	....	....	6	3	....	9
Your Permit to Drive	The Driver	Attitude	20	7	5	5	4	....	5	7	6	79	2	7	88
Your Safety First	Mixed	Information	3	4	1	1	1	....	....	....	....	14	1	....	15

DRIVER EDUCATION FILM RESEARCH PROJECT

Fig. A-1

General Instructions

1. Do not list Aetna 'Drivo-Trainer' films.

2. For each film listed - make sure you check on the same line an item in the columns on Units, Purpose, Utilization, Choice, Time and Producer Purpose.

3. List all other films used. Some good instructors use very few films in their teaching while others use nineteen or more films.

4. If a film is primarily intended to show how to do something, call it a "skills film," if it is primarily intended to give other kinds of information or facts, call it an "information film," and if it is primarily intended to motivate or change attitudes, call it an "attitude film."

---

1. The following number of students were enrolled in my section of the High School Driver Education course, Spring Semester, 1959.

   _____

2. State the unit(s) of instruction and specific purposes for which no satisfactory film exists, but where one is needed.

UNIT	PURPOSE
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. I used no films, because I taught only Practice Driving, Spring Semester, 1959. (Choose one) _____ Correct; _____ Incorrect

4. I taught in the classroom, and I used no films in my teaching, Spring Semester, 1959. (Choose one) _____ Correct; _____ Incorrect

5. The total weeks in my Driver Education Course Spring Semester, 1959, were

   _____ weeks.

_____
(Signature)

EXACT TITLE OF FILM SHOWN SPRING SEMESTER, 1959.	Code 8-9-10
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	

UNITS OF INSTRUCTION 11

(Indicate to the right of each film the unit of instruction in which you showed each film. Use the number to the left of the unit for the basis for selection.)

1 The Traffic Problem

2 Driving Skills

3 The Driver - Physical Requirements, Attitude & Social Responsibilities

4 Traffic Law and Enforcement

5 Natural Laws - Friction, Gravity, etc.

6 The Car - Mechanism & Maintenance

7 Other Highway Users - Pedestrians and Cyclists

8 Traffic and Highway Engineering

9 Others (List)

_____

_____

SPECIFIC PURPOSE FOR SHOWING FILMS 12

(Listed below are seven purposes for showing films. Mark the number of the purpose which is most nearly like yours in showing films. Use the list below for selecting that purpose and write its number in the space to the right. Write one purpose for each film listed.)

1 Add interest to course in general. No specific purpose.

2 Introduce a unit of instruction

3 Summarize a unit of instruction

4 Demonstrate a specific skill

5 Teach particular information (not a skill)

6 Develop a particular attitude

7 Substitute for other instruction (e.g., cars deadlined)

Study 592 Col.(1-2-3) Resp. (4-5-6-7) Tot F (8-9) Units I (10) II (11) III (12) IV (13) V (14)

DO NOT WRITE IN THIS SPACE.

SS (24) Loc (25) Tot St (26-27-28) PF 1 (29-30) PF 1 (31-32)

PF 5 (45-46) PF 5 (47-48) PDO (49) UNF (50)

Fig. A-1 (Con.)

FILM RESEARCH PROJECT

UTILIZATION TECHNIQUES YOU USED WITH FILMS 13	FIRST CHOICE OR SUBSTITUTE 14	TIME IN COURSE 15-16	ESTIMATED PURPOSE OF FILM PRODUCER 17
(Listed below are several utilization techniques you may use in showing films. Indicate by a number in the spaces to the right your main technique for each film listed.) 1 Focus attention on particular points to be learned 2 Stimulate attention to film as a whole 3 This film is self-explanatory - no utilization technique needed 4 No extra time during this class period	(Using the code below, tell if the film you listed was your first choice or a substitute for use in each unit.) 1 First choice 2 Substitute	(List below the week of the course in which you used each film.)	(Indicate by the use of one of the numbers below, your estimate of the producer's purpose in making this film. Use the key below to choose your answer.) 1 Information Film 2 Attitude Film 3 Skills Film

VI ___ (15) VII ___ (16) VIII ___ (17) IX ___ (18) X ___ (19) XI ___ (20) Tot A ___ (21) Tot B ___ (22) Tot C ___ (23)

PF 2 ___ (33-34) PF 2 ___ (35-36) PF 3 ___ (37-38) PF 3 ___ (39-40) PF 4 ___ (41-42) PF 4 ___ (43-44)

Card 1 ___ (80)

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY SKILLS	94
" INFORMATION	32
" ATTITUDE	6

Driving In The City

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU–UM AUDIO–VISUAL CENTERS

INSTRUCTION UNITS:

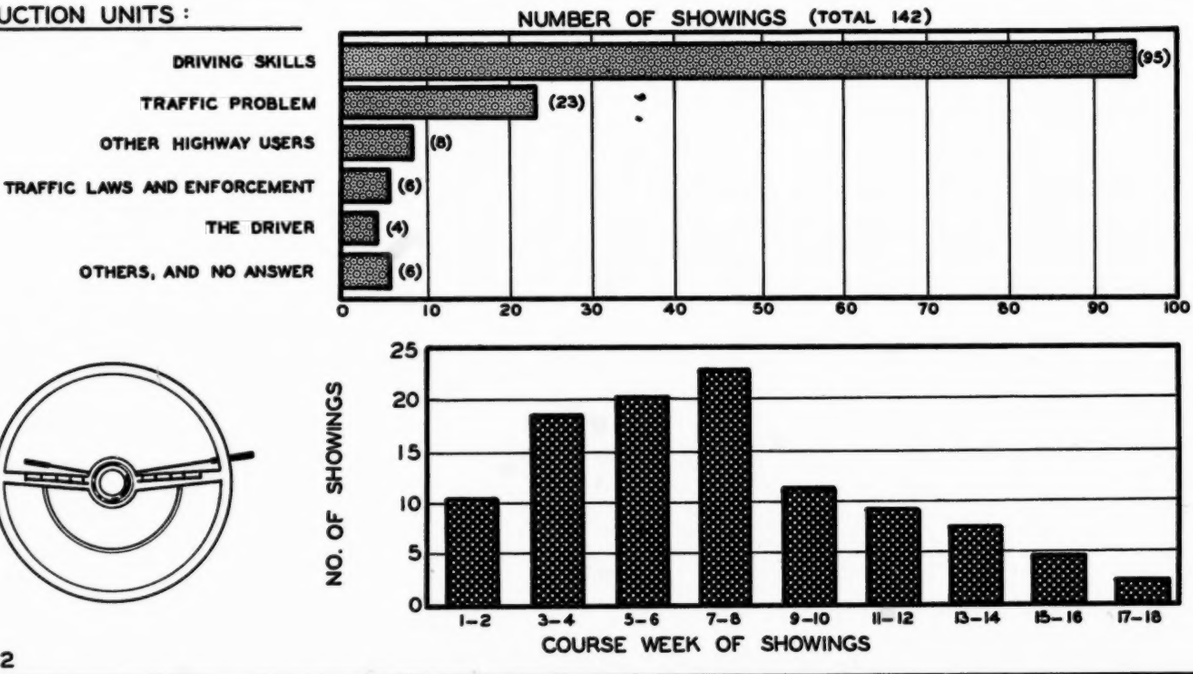


FIG. A–2

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY ATTITUDE	111
" INFORMATION	10
" SKILLS	1

Case Of Officer Hallibrand

PRODUCED BY OHIO OIL COMPANY

AVAILABLE FROM MSU—UM AUDIO—VISUAL CENTERS

INSTRUCTION UNITS:

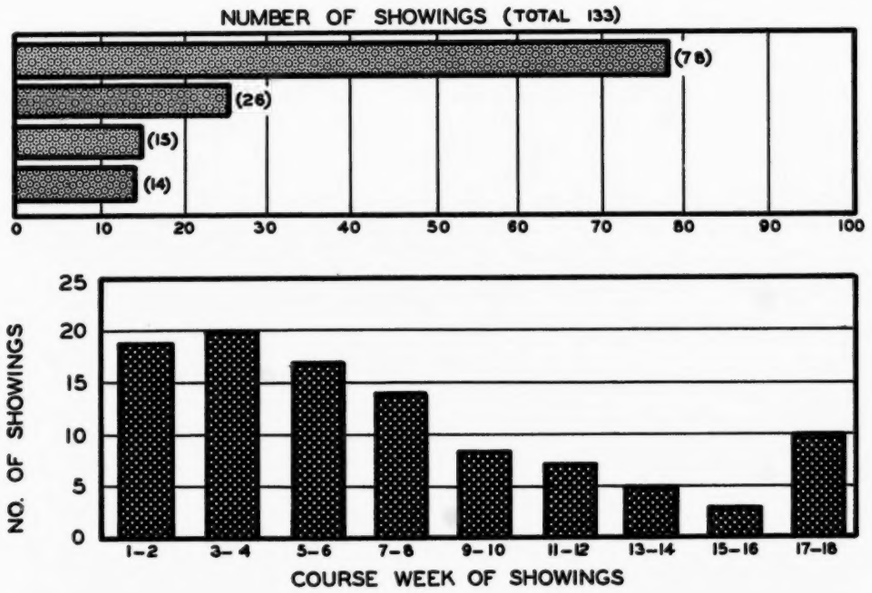


FIG. A–3

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY SKILLS	73
" INFORMATION	29
" ATTITUDE	10

Driving On The Highway

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU–UM AUDIO–VISUAL CENTERS

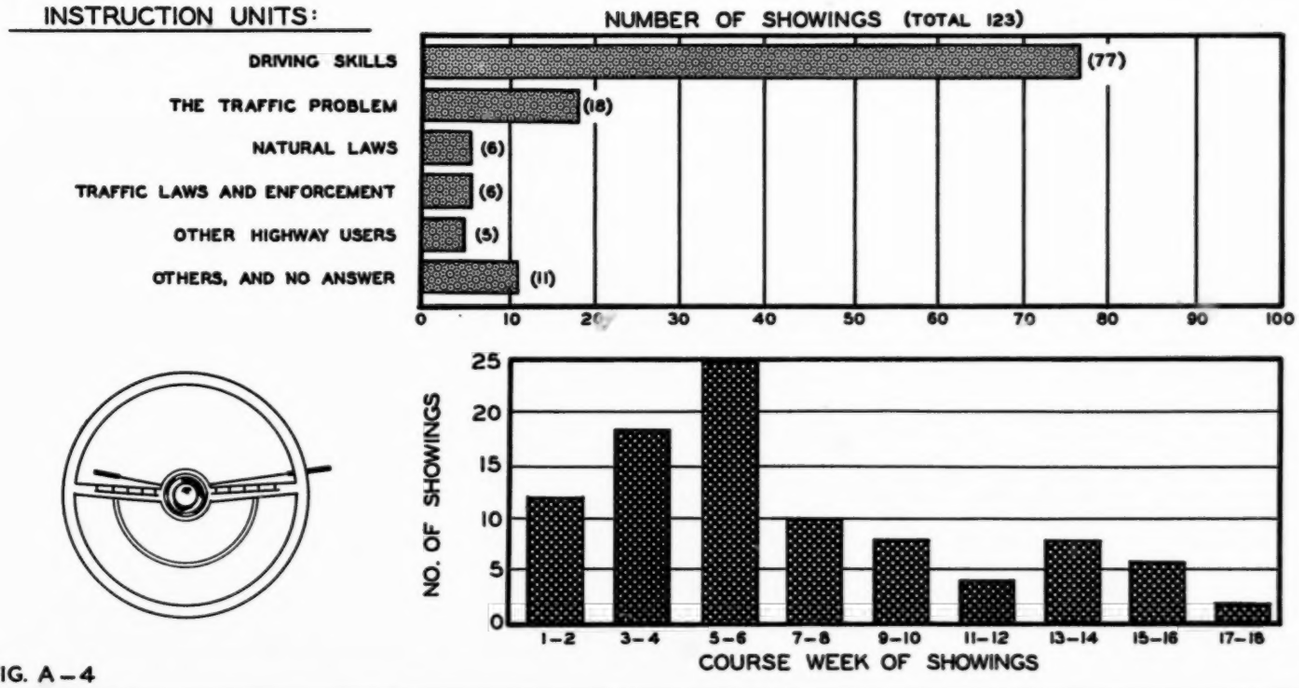


FIG. A–4

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY SKILLS	72
" INFORMATION	26
" ATTITUDE	11

Driving Under Adverse Conditions

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU–UM AUDIO–VISUAL CENTERS

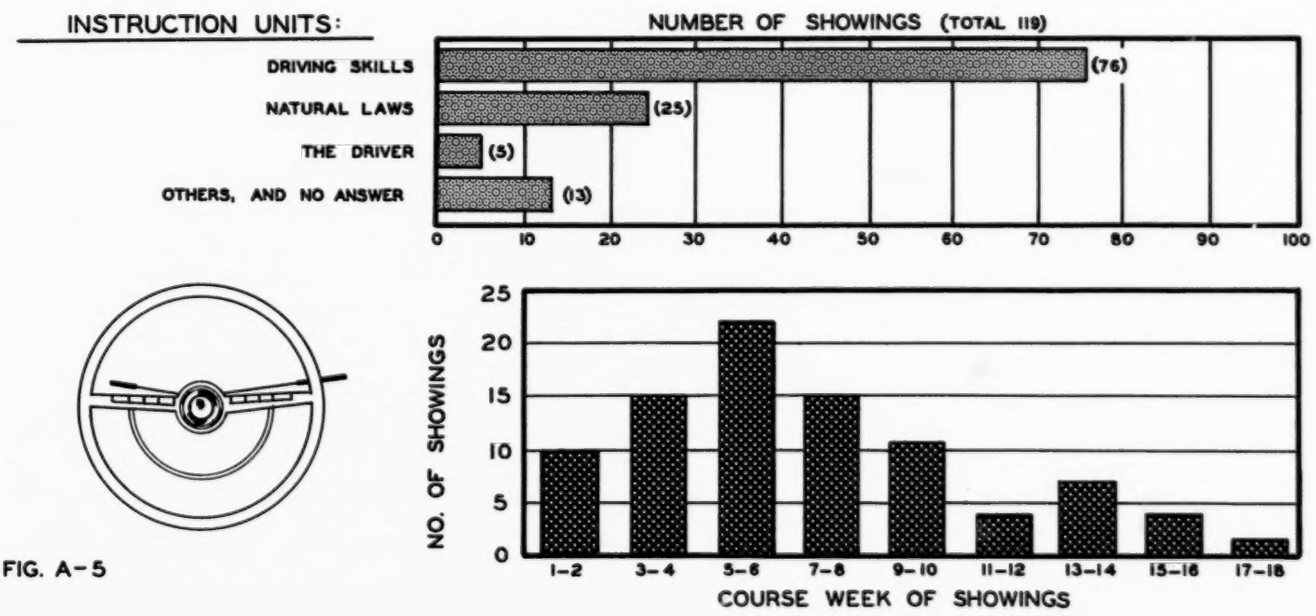


FIG. A–5

ESTIMATE OF FILM TYPE BY INSTRUCTORS :	NUMBER OF INSTRUCTORS:
PRIMARILY INFORMATION	89
" SKILLS	7
" ATTITUDE	3

ABC Of The Automobile Engine

PRODUCED BY GENERAL MOTORS CORP.

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

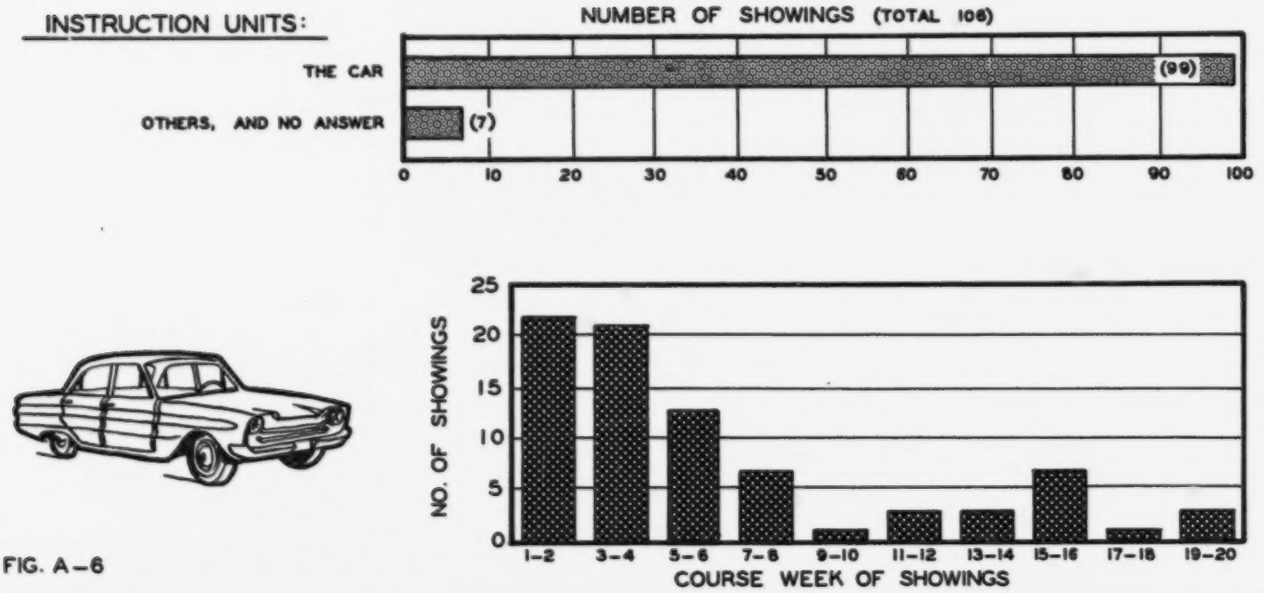

INSTRUCTION UNITS:
THE CAR
OTHERS, AND NO ANSWER
NUMBER OF SHOWINGS (TOTAL 106)
(99)
(7)
0 10 20 30 40 50 60 70 80 90 100
NO. OF SHOWINGS
25 20 15 10 5 0
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17-18 19-20
COURSE WEEK OF SHOWINGS

FIG. A-6

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY ATTITUDE	80
" INFORMATION	7
" SKILLS	0

And Then There Were Four

PRODUCED BY SOCONY MOBIL OIL COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

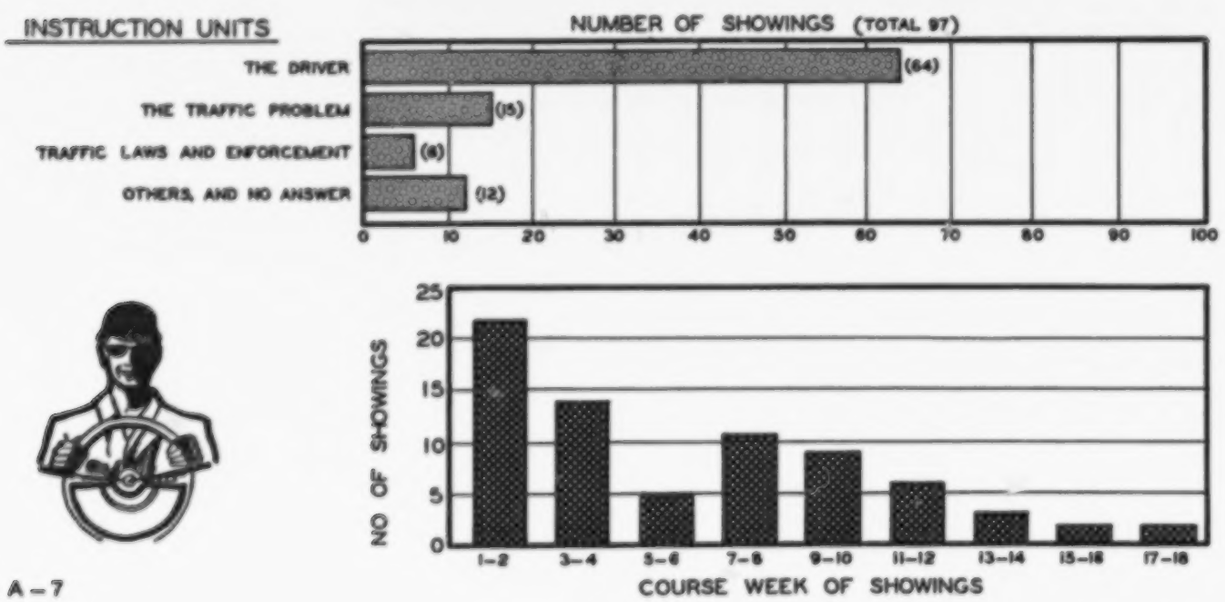


FIG. A-7

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY SKILLS	57
" INFORMATION	25
" ATTITUDE	5

Driving At Night

PRODUCED BY FORD MOTOR COMPANY
AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

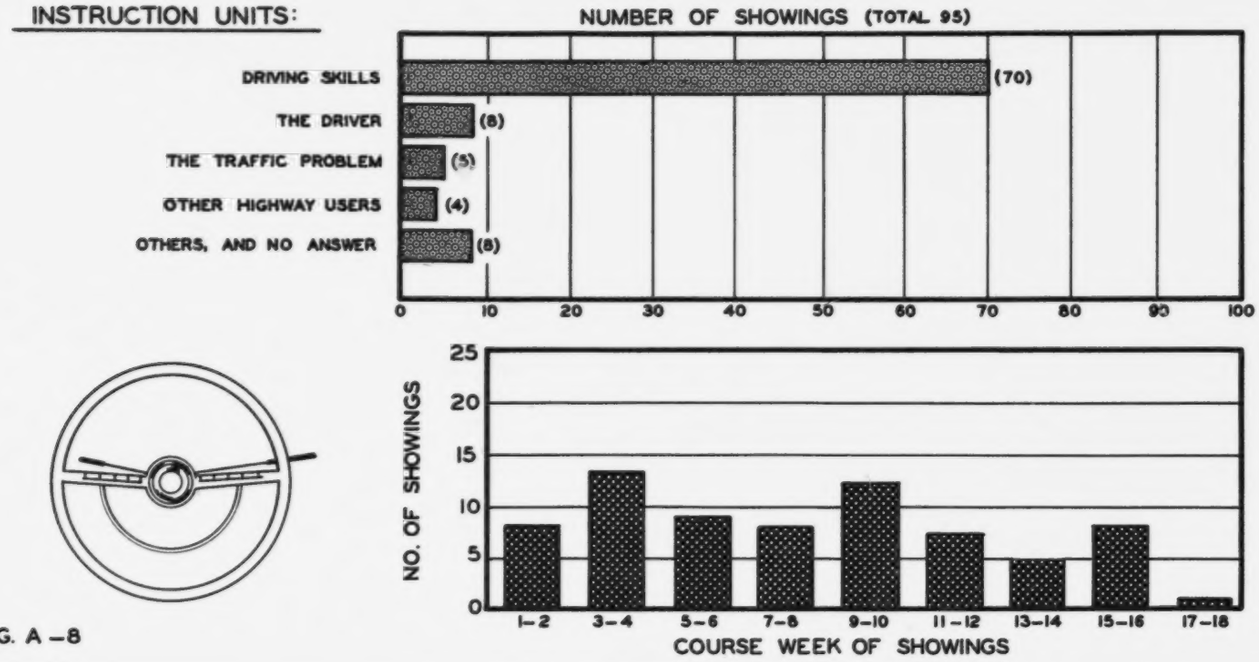


FIG. A-8

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY SKILLS	71
" INFORMATION	8
" ATTITUDE	1

Parking The Car

PRODUCED BY FORD MOTOR COMPANY
AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

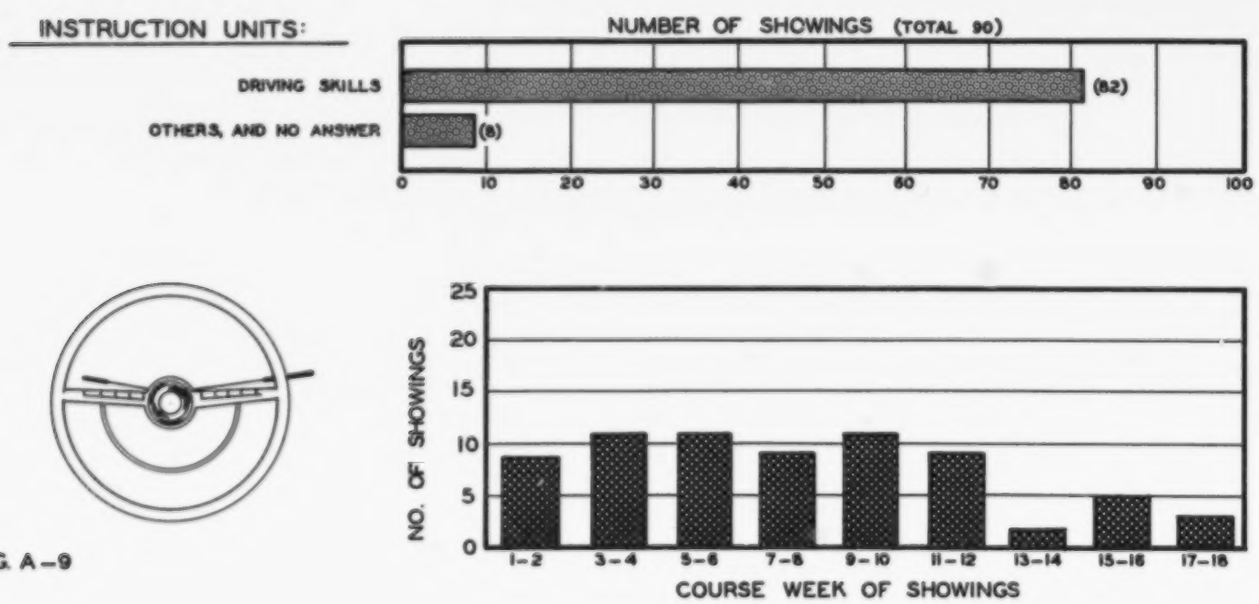

INSTRUCTION UNITS:
NUMBER OF SHOWINGS (TOTAL 90)
DRIVING SKILLS
OTHERS, AND NO ANSWER
(82)
(8)
0 10 20 30 40 50 60 70 80 90 100
NO. OF SHOWINGS
0 5 10 15 20 25
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17-18
COURSE WEEK OF SHOWINGS

FIG. A-9

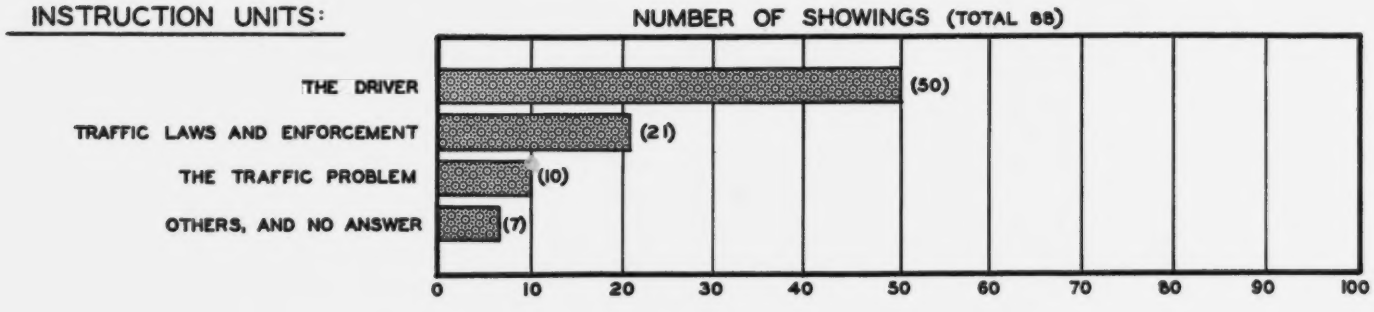
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	ATTITUDE	55
"	INFORMATION	26
"	SKILLS	0

Your Permit To Drive

PRODUCED BY GENERAL MOTORS CORP.

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:



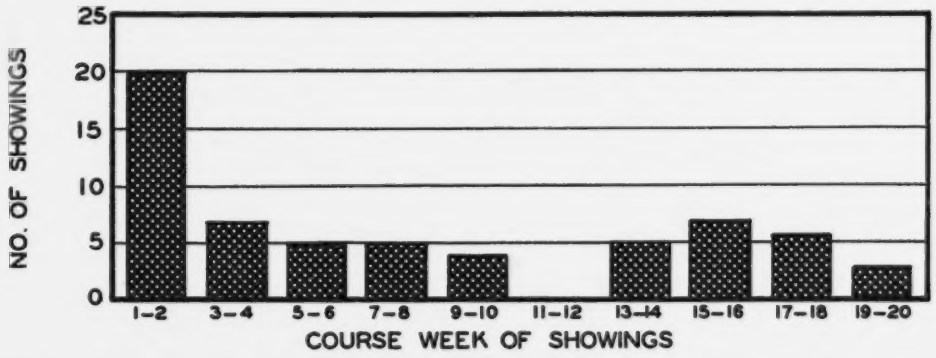


FIG. A-10

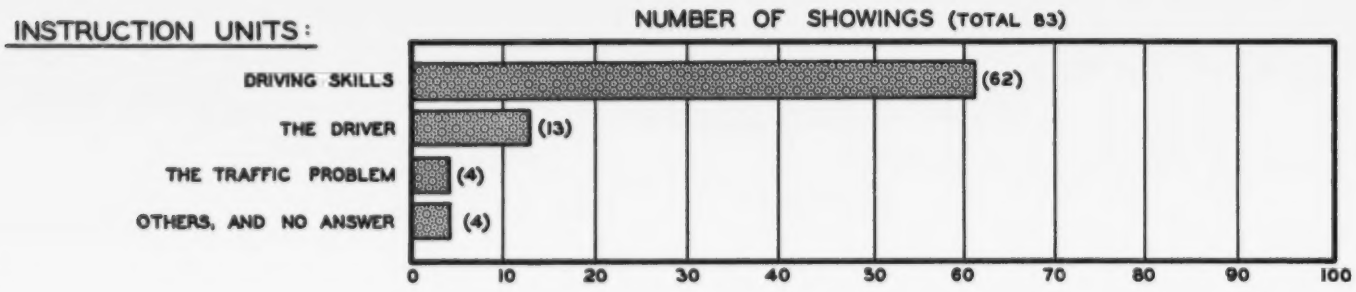
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	SKILLS	49
"	INFORMATION	22
"	ATTITUDE	7

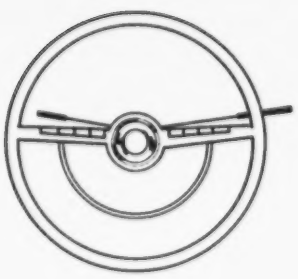
Smith System Of Non - Accident Driving

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:





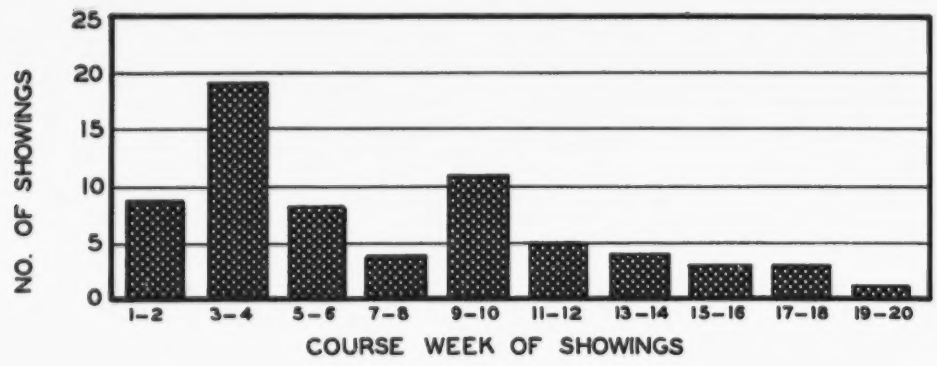


FIG. A-11

ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	ATTITUDE	40
"	INFORMATION	22
"	SKILLS	13

We Drivers

PRODUCED BY GENERAL MOTORS CORP.
AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:

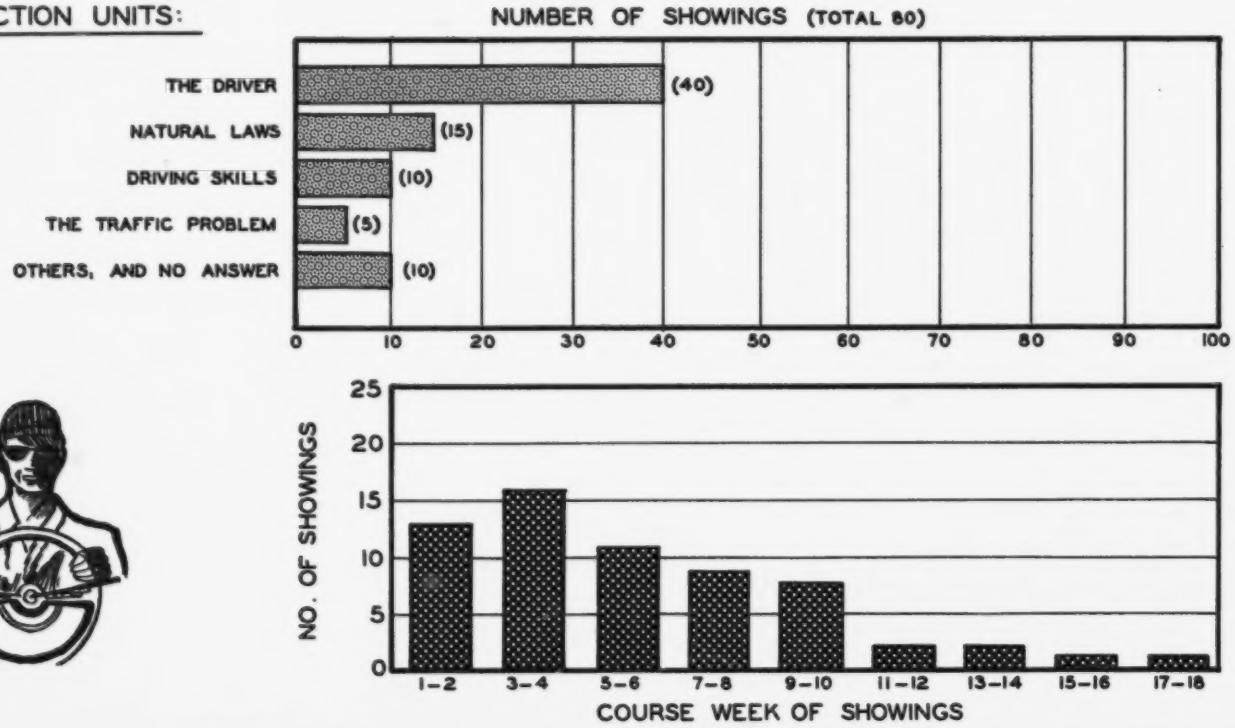


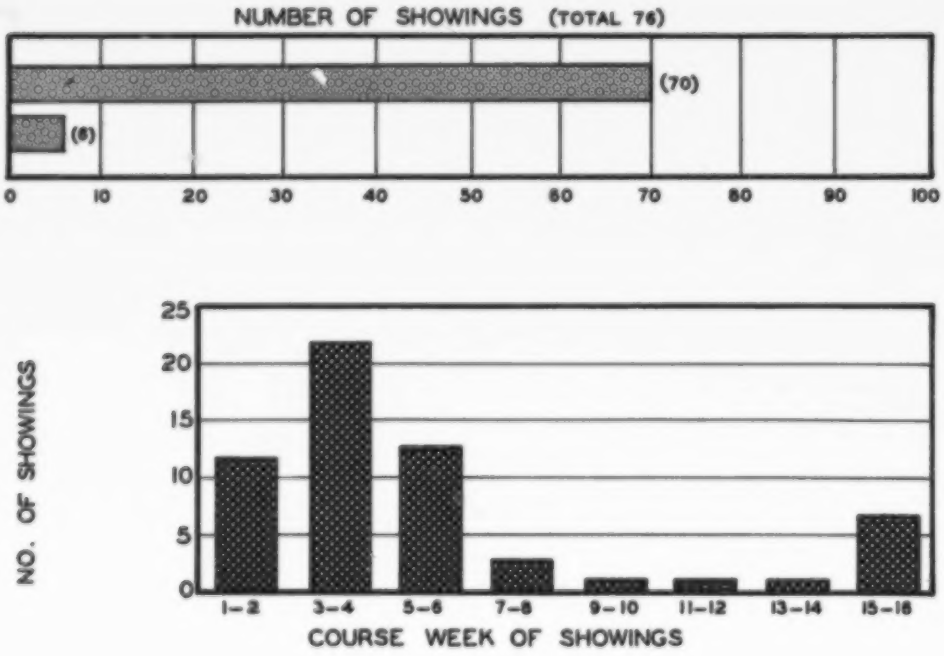
FIG. A-12

ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	INFORMATION	63
"	SKILLS	6
"	ATTITUDE	1

ABC Of The Internal Combustion Engine

PRODUCED BY GENERAL MOTORS CORP.
AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:


NUMBER OF SHOWINGS (TOTAL 76)
THE CAR
OTHERS, AND NO ANSWER
(70)
(6)
0 10 20 30 40 50 60 70 80 90 100
NO. OF SHOWINGS
0 5 10 15 20 25
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16
COURSE WEEK OF SHOWINGS

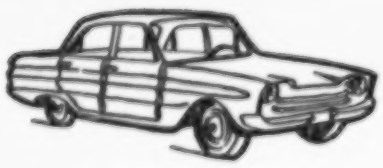


FIG. A-13

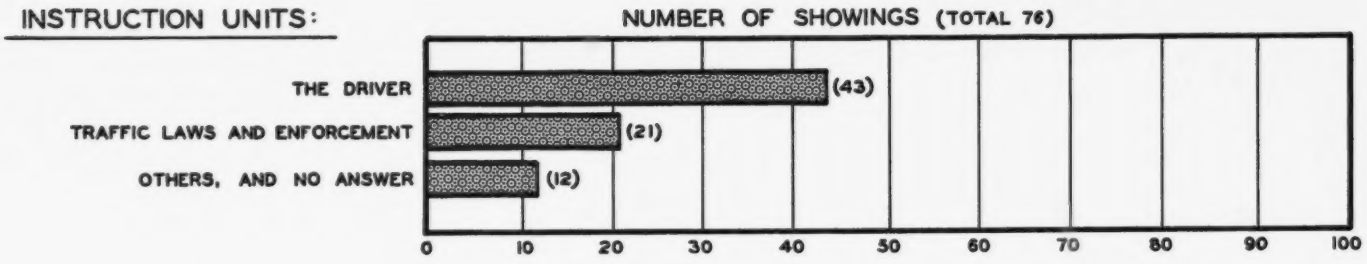
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	ATTITUDE	61
"	INFORMATION	6
"	SKILLS	0

A Day In Court

PRODUCED BY INTERNATIONAL HARVESTER

AVAILABLE FROM MSU–UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:



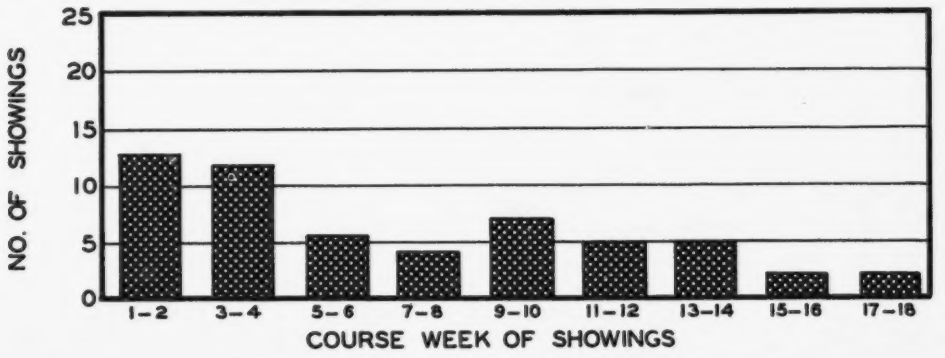


FIG. A–14

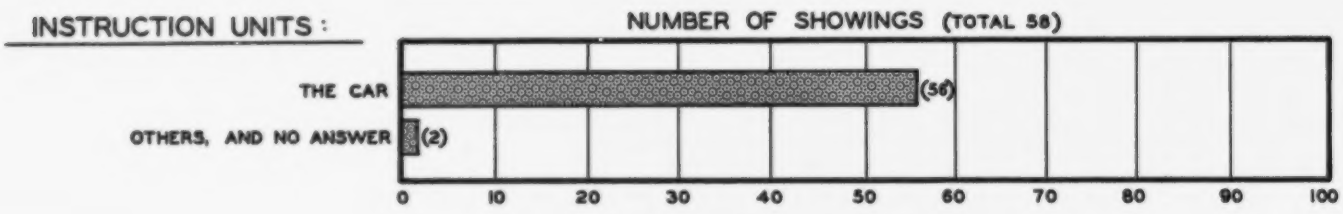
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	INFORMATION	38
"	SKILLS	11
"	ATTITUDE	5

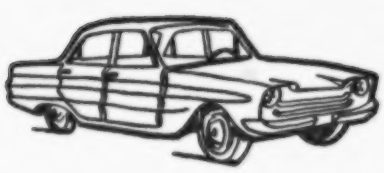
Care Of The Car

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU–UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:





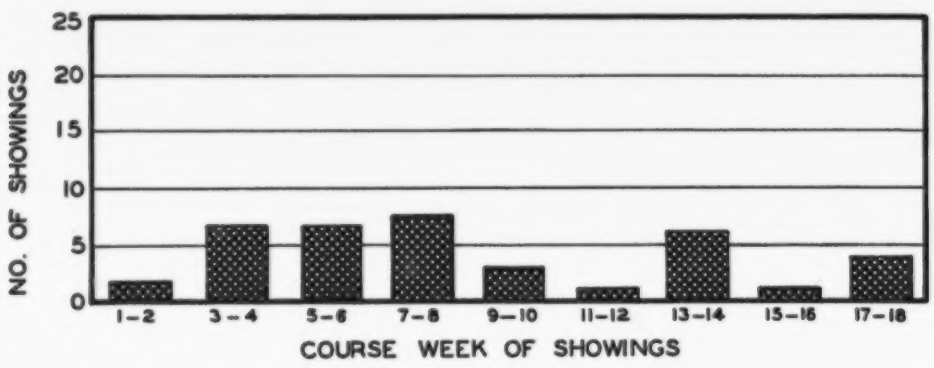


FIG. A–15

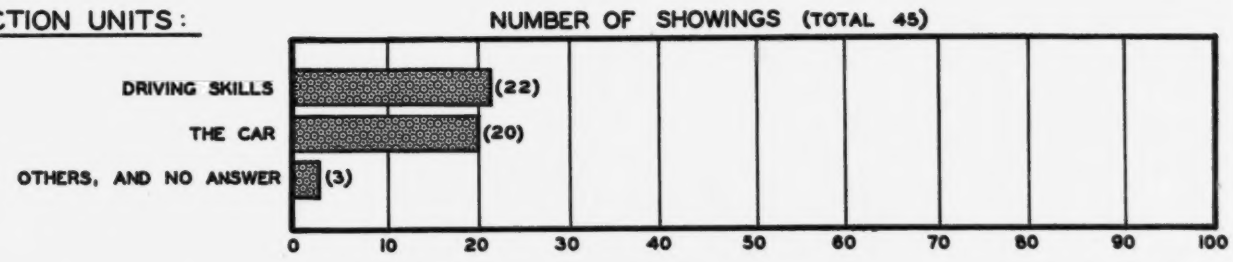
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	INFORMATION	23
"	SKILLS	12
"	ATTITUDE	5

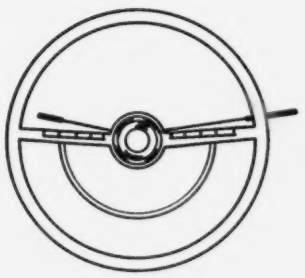
Automatic Transmissions

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU–UM AUDIO–VISUAL CENTERS

INSTRUCTION UNITS:





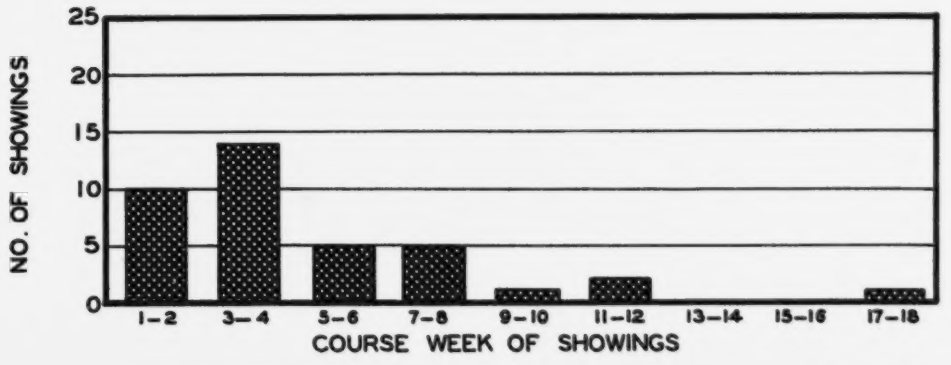


FIG. A–16

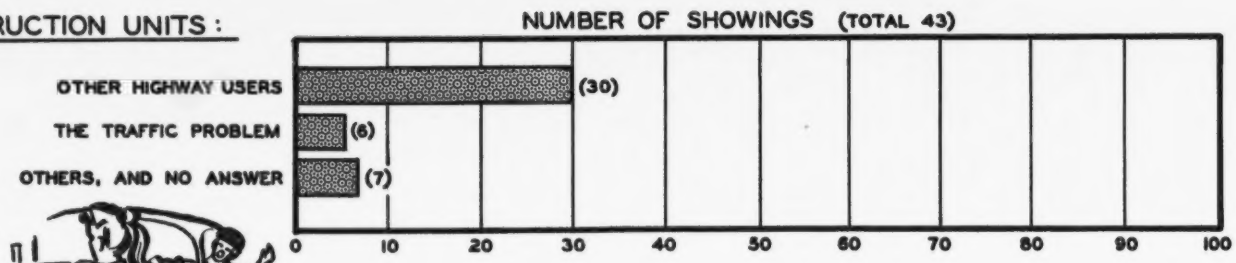
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	INFORMATION	22
"	ATTITUDE	11
"	SKILLS	5

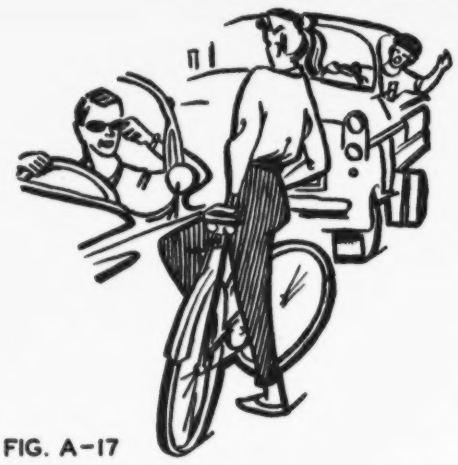
Pedestrians

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU–UM AUDIO–VISUAL CENTERS

INSTRUCTION UNITS:





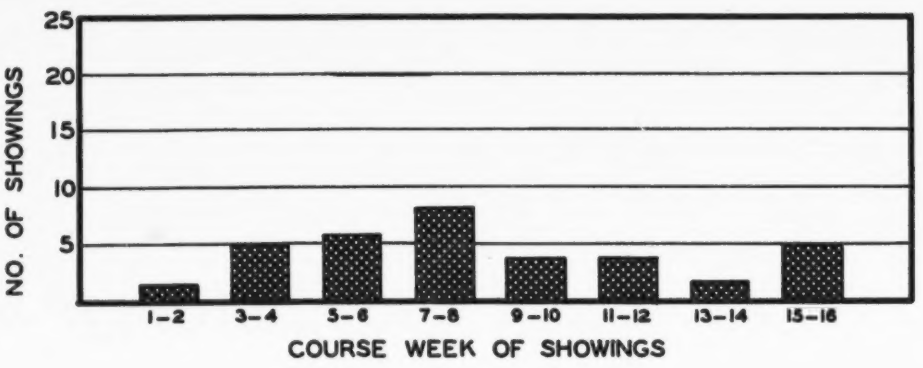


FIG. A–17

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY ATTITUDE	31
" INFORMATION	2
" SKILLS	0

According To The Record

PRODUCED BY MICHIGAN STATE POLICE

AVAILABLE FROM WAYNE COUNTY LIBRARY SYSTEM AUDIO-VISUAL CENTER

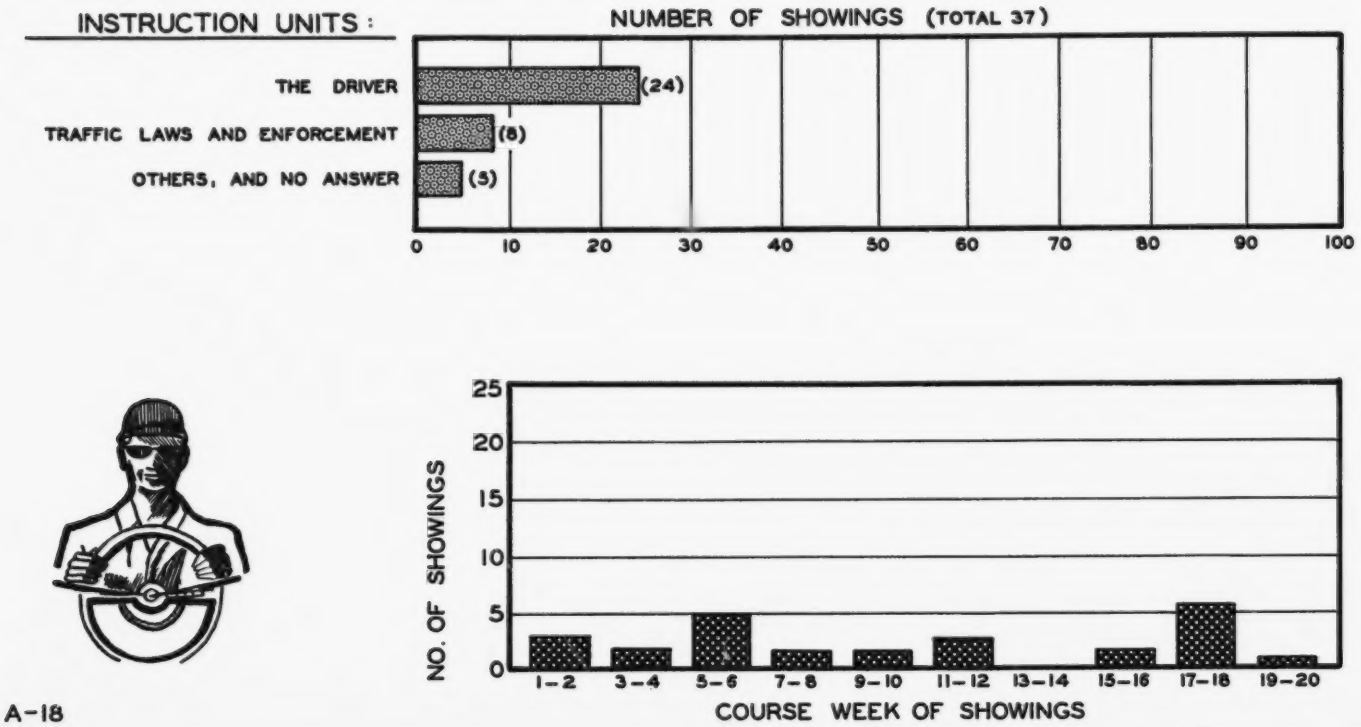

INSTRUCTION UNITS:
NUMBER OF SHOWINGS (TOTAL 37)
THE DRIVER
(24)
TRAFFIC LAWS AND ENFORCEMENT
(8)
OTHERS, AND NO ANSWER
(5)
0 10 20 30 40 50 60 70 80 90 100
NO. OF SHOWINGS
0 5 10 15 20 25
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17-18 19-20
COURSE WEEK OF SHOWINGS

FIG. A-18

ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY SKILLS	21
" ATTITUDE	9
" INFORMATION	4

Passing Fancy

PRODUCED BY GENERAL MOTORS CORP.

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

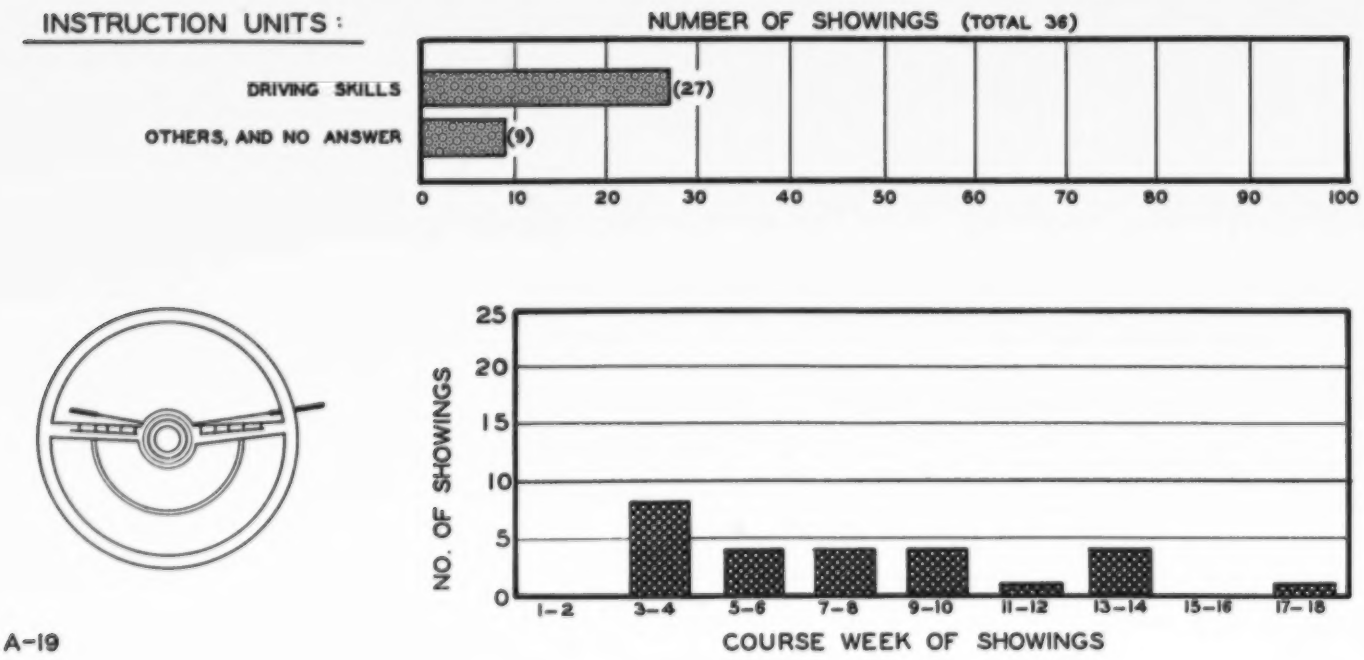

INSTRUCTION UNITS:
NUMBER OF SHOWINGS (TOTAL 36)
DRIVING SKILLS
(27)
OTHERS, AND NO ANSWER
(9)
0 10 20 30 40 50 60 70 80 90 100
NO. OF SHOWINGS
0 5 10 15 20 25
1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17-18
COURSE WEEK OF SHOWINGS

FIG. A-19

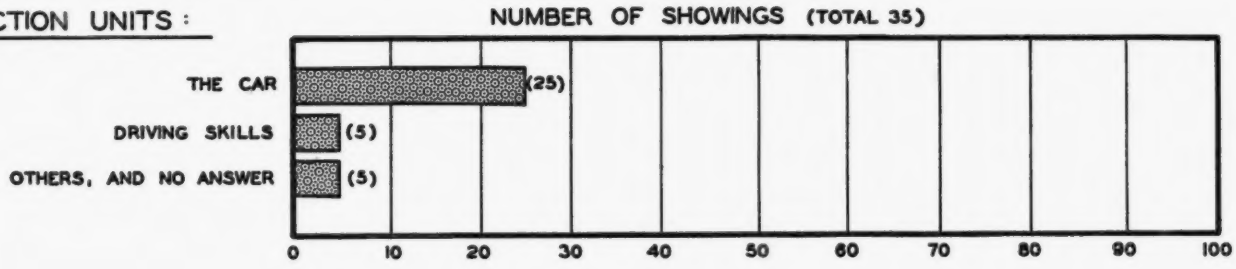
ESTIMATE OF FILM TYPE BY INSTRUCTION:		NUMBER OF INSTRUCTORS:
PRIMARILY	INFORMATION	21
"	ATTITUDE	7
"	SKILLS	5

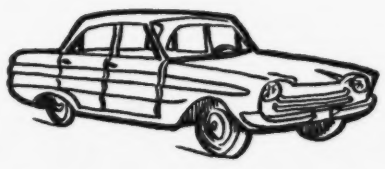
Driving Economically

PRODUCED BY GENERAL MOTORS CORP.

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:





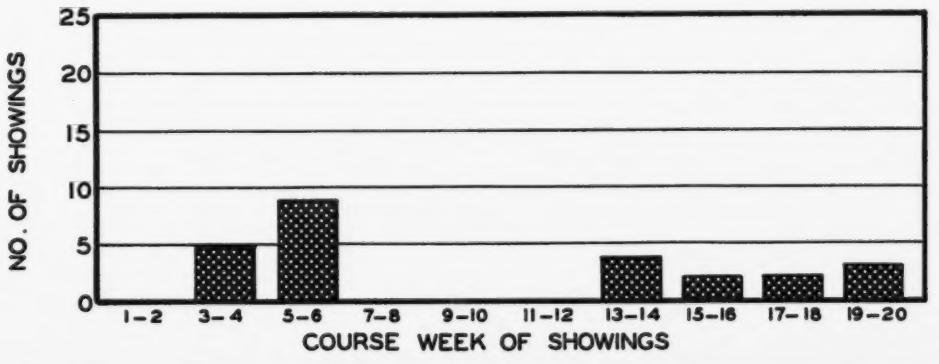


FIG. A-20

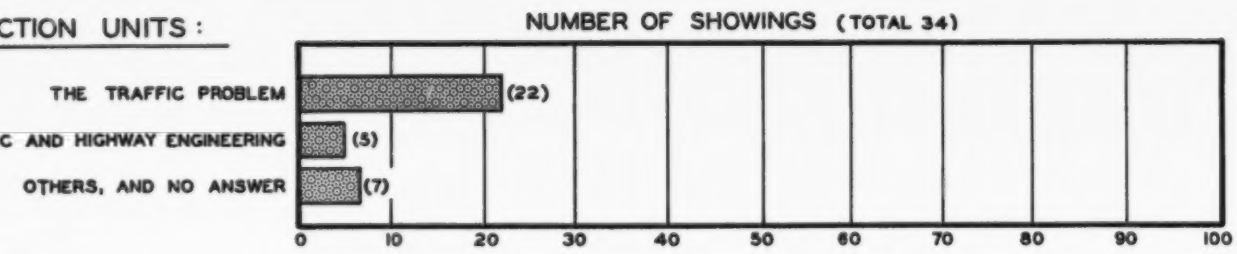
ESTIMATE OF FILM TYPE BY INSTRUCTORS:		NUMBER OF INSTRUCTORS:
PRIMARILY	INFORMATION	28
"	ATTITUDE	3
"	SKILLS	0

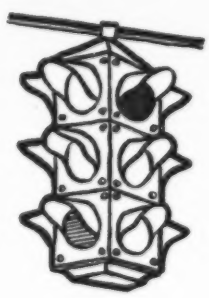
American Road

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS:





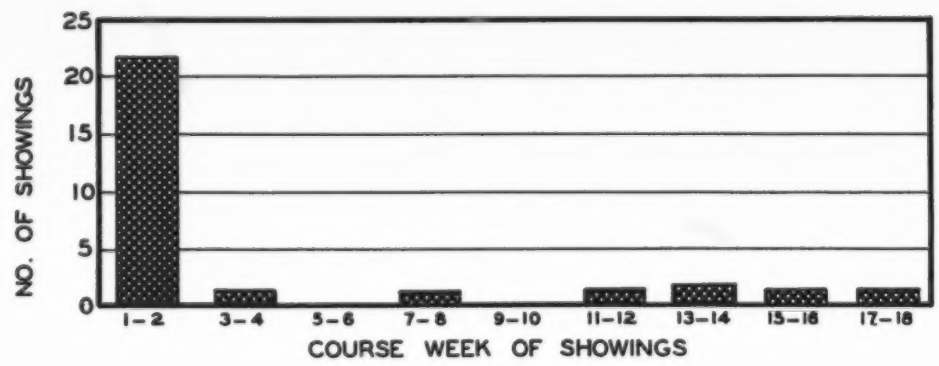


FIG. A-21

ESTIMATE OF FILM TYPE BY INSTRUCTORS :		NUMBER OF INSTRUCTORS :
PRIMARILY	SKILLS	16
"	ATTITUDE	9
"	INFORMATION	4

Home At The Wheel

PRODUCED BY GENERAL MOTORS CORP.

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

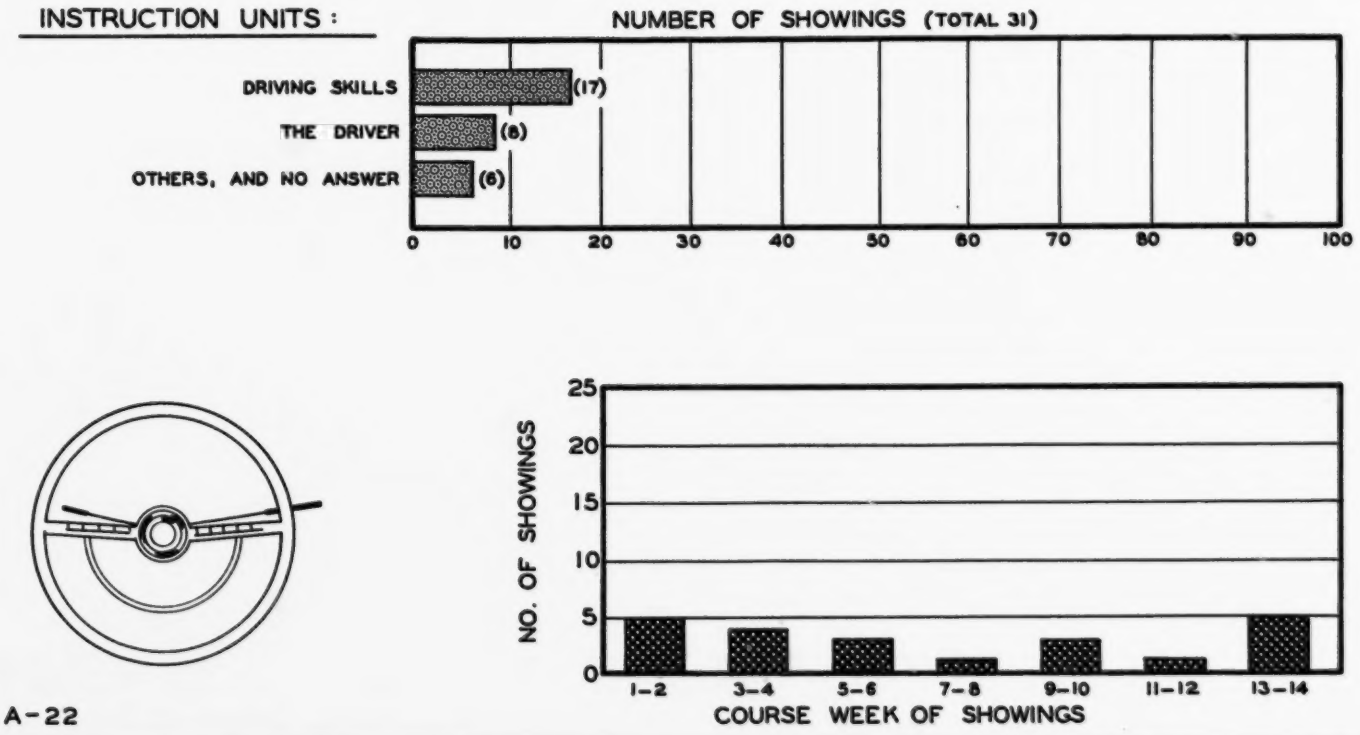


FIG. A-22

ESTIMATE OF FILM TYPE BY INSTRUCTORS :		NUMBER OF INSTRUCTORS :
PRIMARILY	ATTITUDE	19
"	INFORMATION	3
"	SKILLS	3

Last Date

PRODUCED BY MUTUAL CASUALTY COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

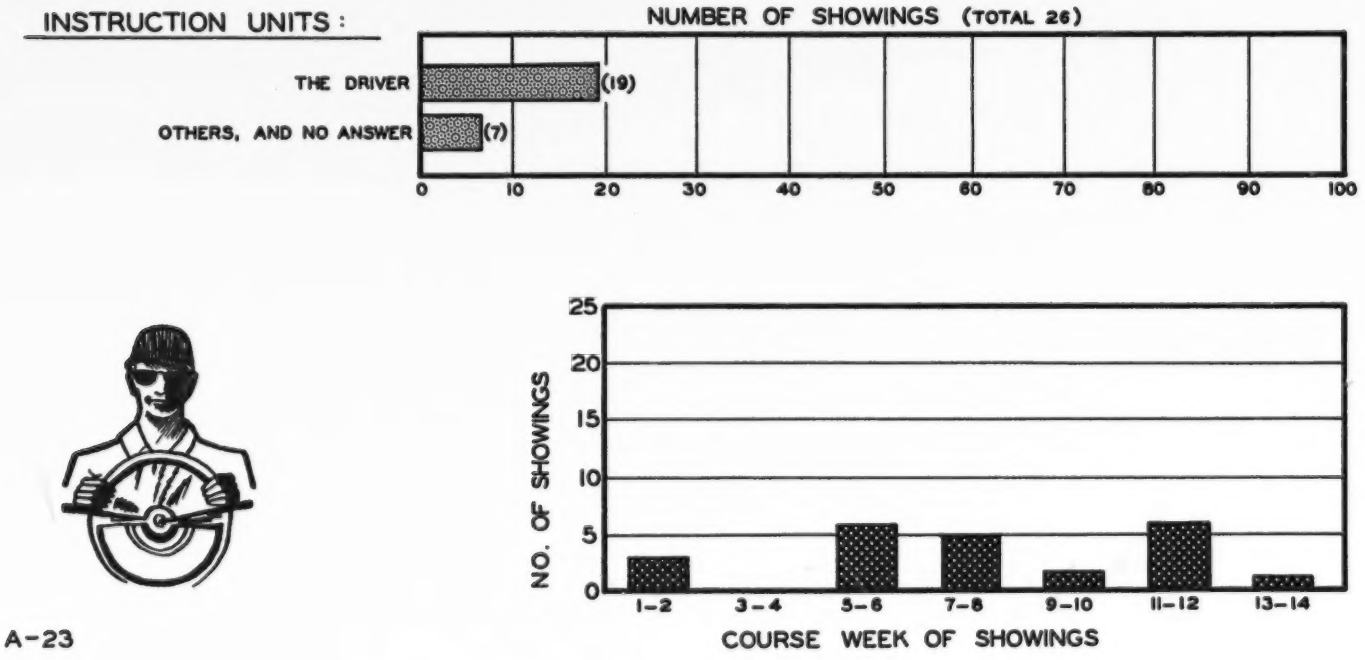


FIG. A-23

ESTIMATE OF FILM TYPE BY INSTRUCTORS :		NUMBER OF INSTRUCTORS :
PRIMARILY	INFORMATION	20
"	ATTITUDE	1
"	SKILLS	0

Freedom Of The American Road

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS :

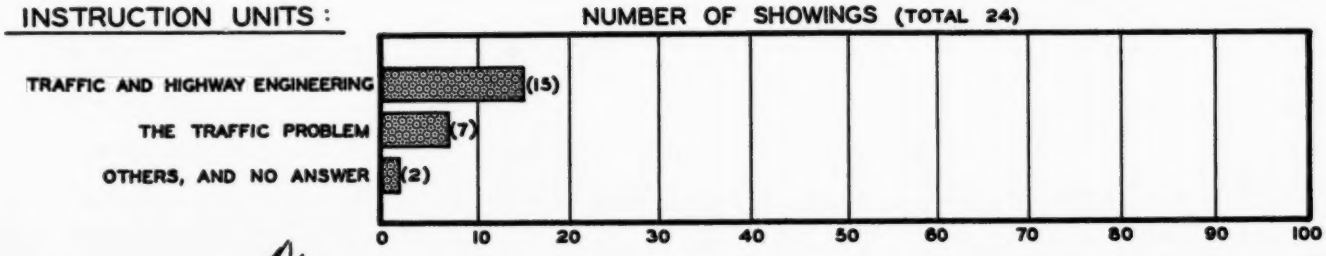
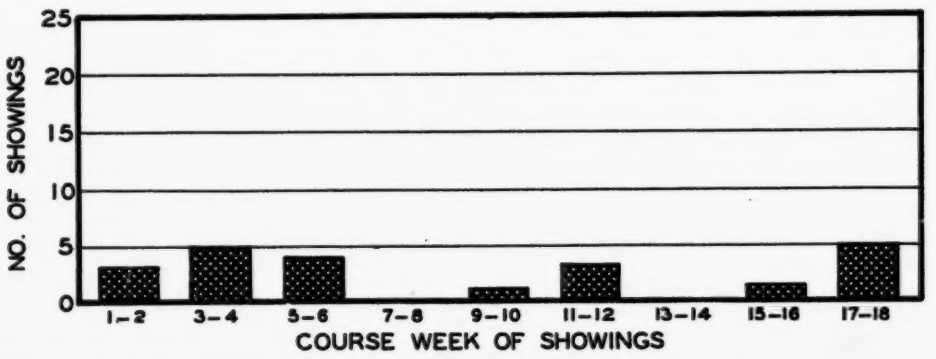


FIG. A-24



ESTIMATE OF FILM TYPE BY INSTRUCTORS :		NUMBER OF INSTRUCTORS :
PRIMARILY	ATTITUDE	16
"	INFORMATION	6
"	SKILLS	1

All Of A Sudden

PRODUCED BY SOCONY MOBIL OIL COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS

INSTRUCTION UNITS :

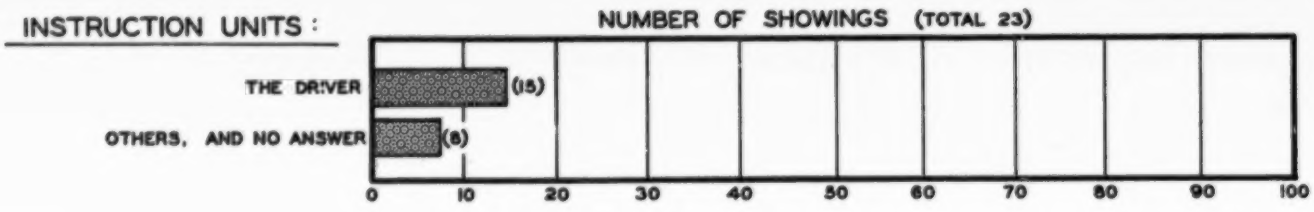
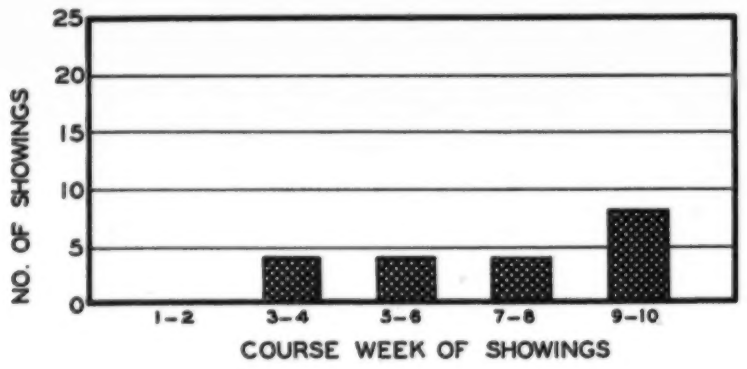


FIG. A-25

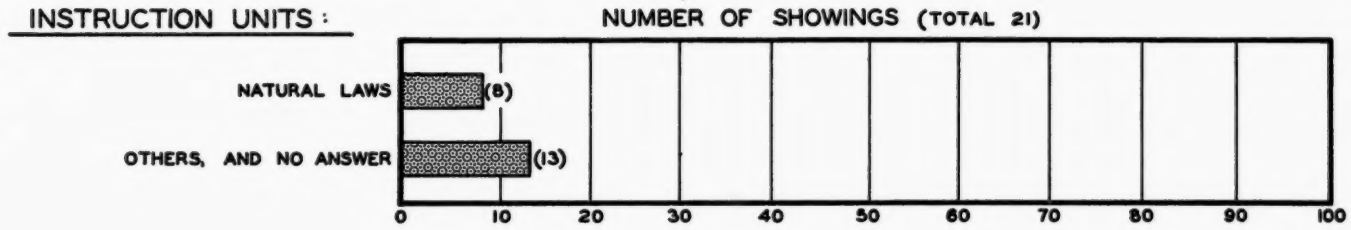


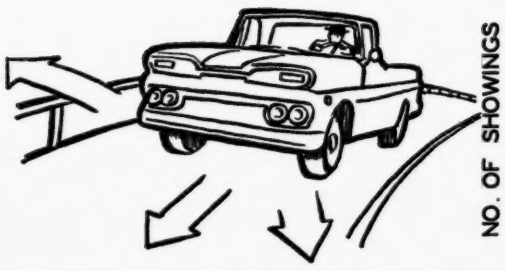
ESTIMATE OF FILM TYPE BY INSTRUCTORS :		NUMBER OF INSTRUCTORS :
PRIMARILY	INFORMATION	12
"	ATTITUDE	5
"	SKILLS	1

Crash And Live

PRODUCED BY FORD MOTOR COMPANY

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS





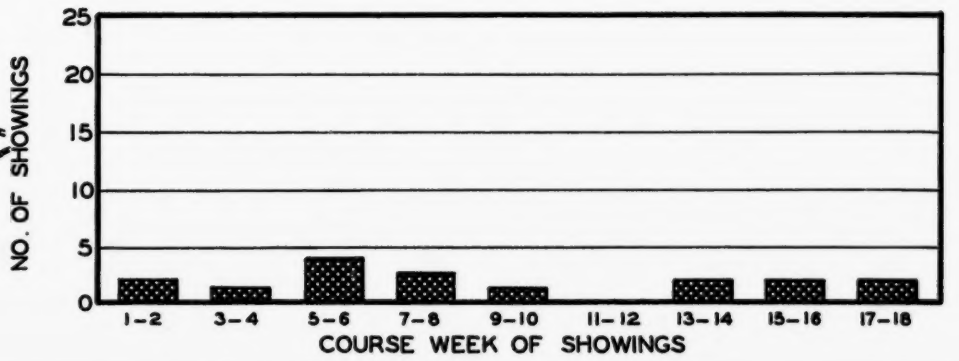


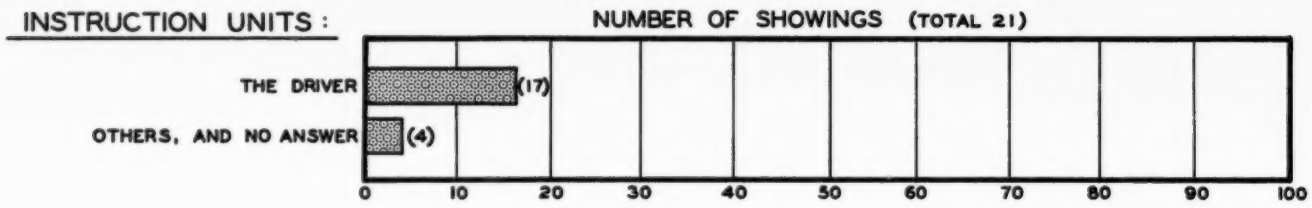
FIG. A-26

ESTIMATE OF FILM TYPE BY INSTRUCTORS :		NUMBER OF INSTRUCTORS :
PRIMARILY	ATTITUDE	19
"	SKILLS	2
"	INFORMATION	0

Look Who's Driving

PRODUCED BY THE AFFILIATED AETNA LIFE COMPANIES

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS



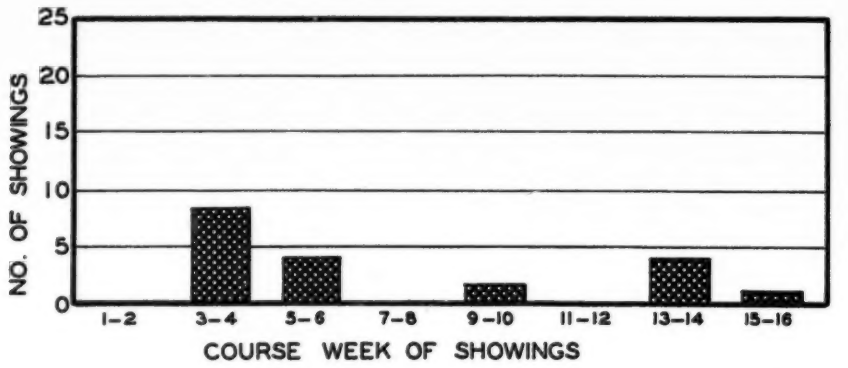


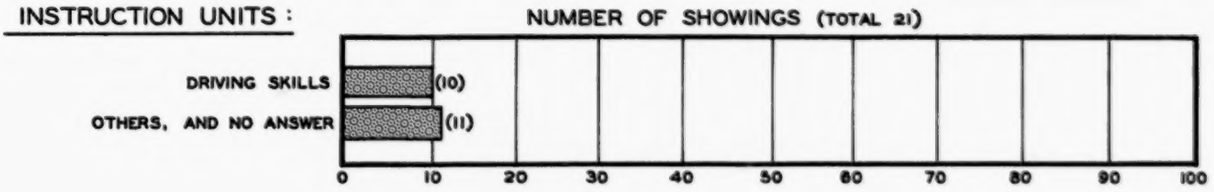
FIG. A-27

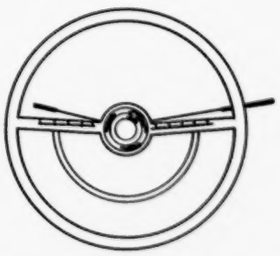
ESTIMATE OF FILM TYPE BY INSTRUCTORS :	NUMBER OF INSTRUCTORS :
PRIMARILY SKILLS	9
" INFORMATION	7
" ATTITUDE	4

Safe Driving : Defensive Driver

PRODUCED BY CORONET INSTRUCTIONAL FILMS

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS





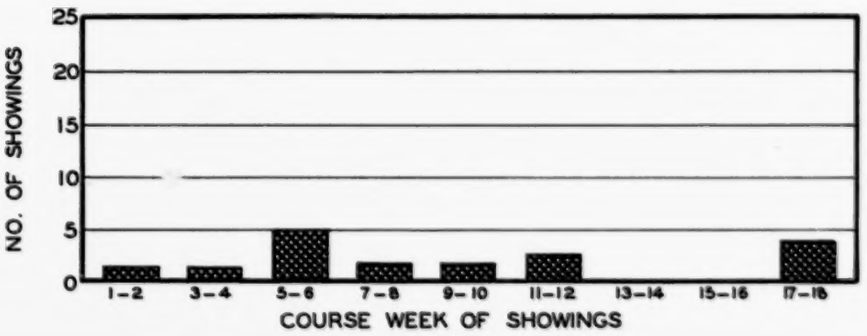


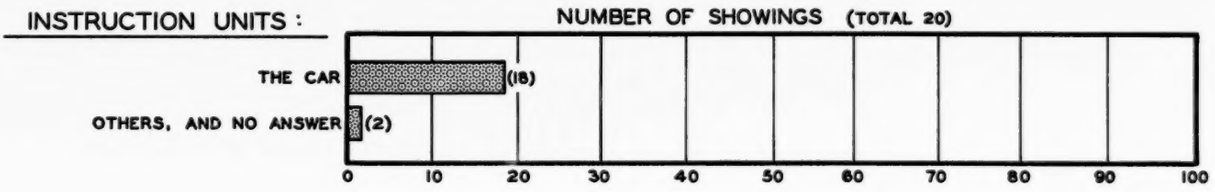
FIG. A-28

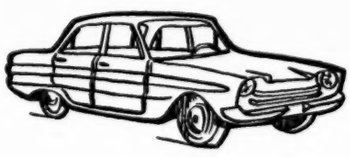
ESTIMATE OF FILM TYPE BY INSTRUCTORS:	NUMBER OF INSTRUCTORS:
PRIMARILY INFORMATION	18
" ATTITUDE	0
" SKILLS	0

Where Mileage Begins

PRODUCED BY GENERAL MOTORS CORP.

AVAILABLE FROM MSU-UM AUDIO-VISUAL CENTERS





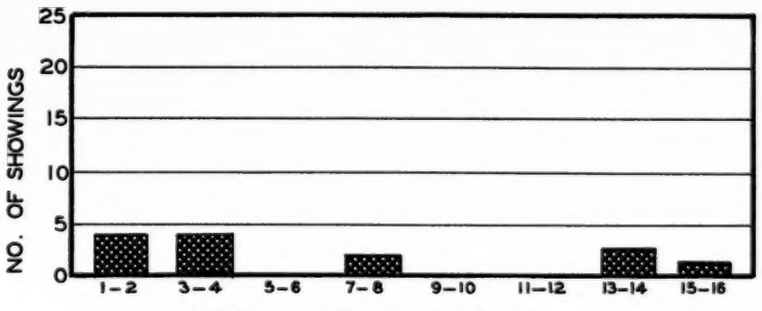


FIG. A-29

Bibliography

Bloom, B. S. (ed.) *Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain.* New York: Longmans, Green, 1956.

Key, Norman. *Status of Driver Education in the United States.* Washington: National Commission on Safety Education, National Education Association, 1960.

May, M. A. and Lumsdaine, A. A. *Learning from Films.* New Haven: Yale University Press, 1958.

Merrill, I. R. and McAshan, H. H. "Predicting Learning, Attitude Shift, and Skill Improvement from a Traffic Safety Film," *Audio-Visual Communications Review,* In Press.

Miller, N. E. "Graphic Communication and the Crisis in Education," *Audio-Visual Communications Review,* Vol. 5, No. 3 (1957).

Parten, Mildred. *Surveys, Polls, and Samples.* New York: Harper and Brothers, 1950.

Twyford, L. C., *et. al.* "Behavioral and Factual Analysis," *Audio-Visual Communications Review,* Vol. 7, No.3 (1959).

Walker, Helen and Lev, Joseph. *Statistical Inference.* New York: Henry Holt, 1953.

Wittich, W. A. and Schuller, C. F. *Audio-Visual Materials and Their Use.* 2nd ed. New York: Harper and Brothers, 1957.

"Catalog of Traffic Safety Motion Pictures," *Michigan State University Publication,* Vol. 52, No. 1 (July, 1957).

"Directory Issue, 1958-59 School Year," *Michigan High School Athletic Association Bulletin,* Vol. XXXV (November, 1958), pp. 194-228.

"Michigan Driver Education Manual," *Michigan Department of Public Instruction,* Bulletin No. 360, 1956.

Act 260. State of Michigan, Public Acts of 1959.